ROBERTSON

Observations on Diseases

Incident to Seamen
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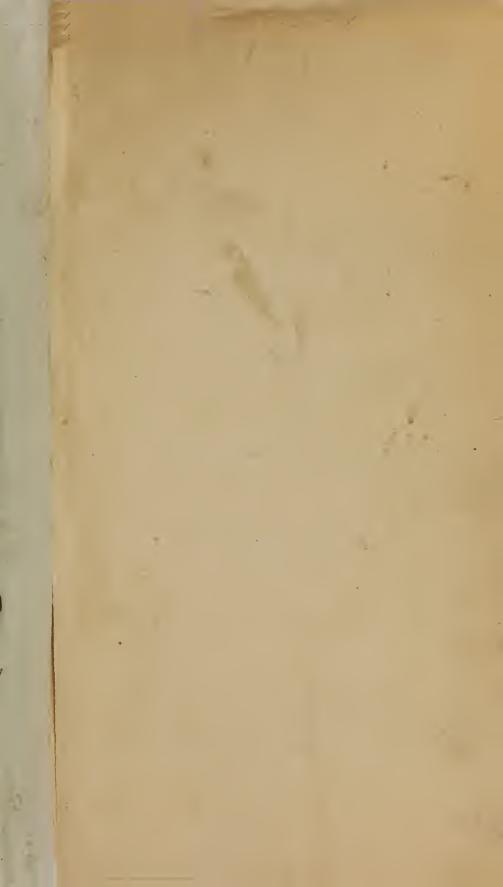


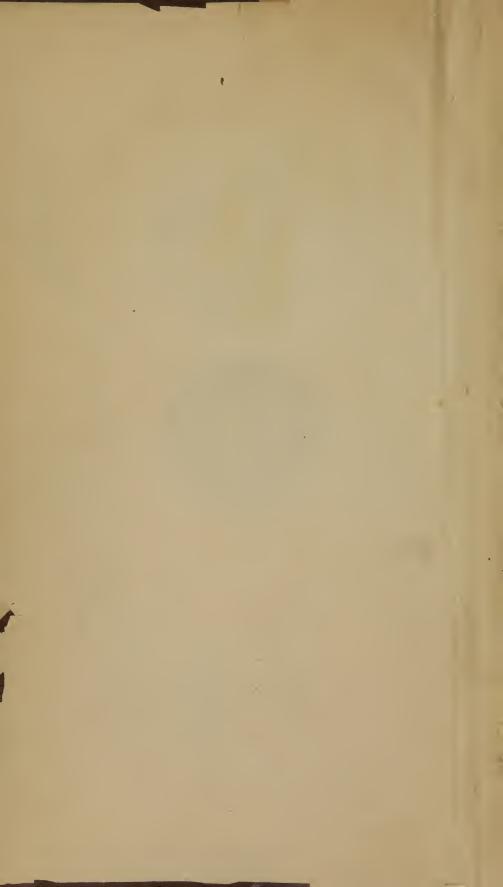
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### OBSERVATIONS

ON

### DISEASES

# INCIDENT TO SEAMEN,

WHETHER EMPLOYED ON, OR RETIRED FROM
ACTUAL SERVICE—FOR ACCIDENTS,
INFIRMITIES, OR OLD AGE.

BY ROBERT ROBERTSON, M.D. F.R.S. F.A.S.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; AND PHYSICIAN TO THE ROYAL HOSPITAL, GREENWICH.

The vessels in which we had embarked being confessedly unequal to the turbulence of the stream of life, were visibly impaired in the confrse of the voyage; so that every passenger was certain, that how long soever he might, by favourable accidents, or by incessant vigilance, be preserved, he must yield at last.

\*\*Rambler\*, No. 102.\*\*

The hardy Tar, who guards Britannia's Isle, Defends her freedom, makes her commerce smile, Whether he braves the hostile camon's roar, Or seeks repose when all his toils are o'er, Claims every aid that med'eine ean impart To soften pain, or ease the throbbing heart.

Anonym.

A NEW EDITION, MUCH ENLARGED AND IMPROVED.

IN FOUR VOLUMES.

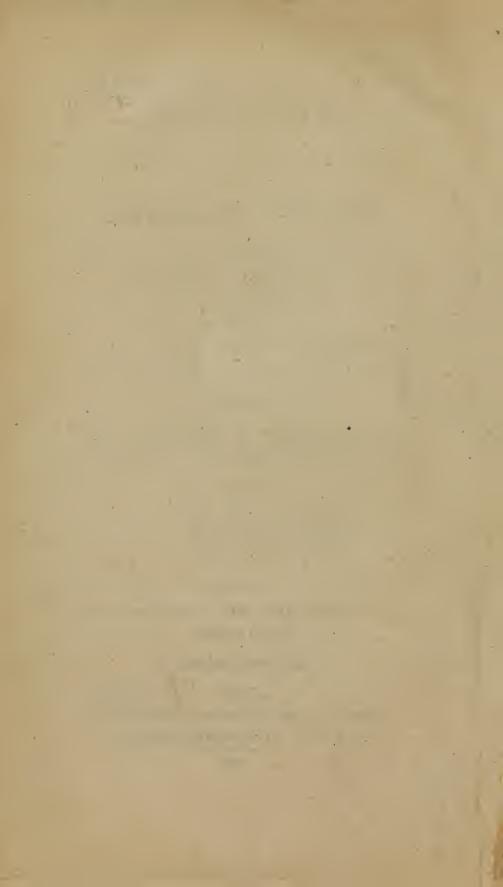
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PRINTED FOR T. CADELL AND W. DAVIES, STRAND,

BY R. WILKS, CHANCERY-LANE, FLEET-STREET.

1907.



# OBSERVATIONS

ON

### FEVERS

WHICH ARISE FROM

### MARSH MIASMATA,

AND FROM OTHER CAUSES,

IN EUROPE, AFRICA, THE WEST INDIES, AND NEWFOUNDLAND;

WIH OCCASIONAL REMARKS

ON

### THE PRINCIPAL DISEASES

INCIDENT TO

### SEAMEN.

By ROBERT ROBERTSON, M.D. F.RIS. F.A.S.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; AND PHYSICIAN TO THE ROYAL HOSPITAL, GREENWICH.

### Deus! conamini faveto.

Adhibenda igitur consideratio, et loci, et tempestatis anni, et ætatis et morborum in quibus hæc fieri debent.

IN FOUR VOLUMES.

VOL. I.

#### LONDON:

PRINTED FOR T. CADELL AND W. DAVIES, STRAND,

BY R. WILKS, CHANCERY-LANE, FLEET-STREET.

1807

Med. Hist. VV Z 290 R6510 1807 V.1 Roe C. 82-43-1

### RIGHT HONOURABLE

# HENRY ADDINGTON,

FIRST LORD OF THE TREASURY, CHANCELLOR OF /
THE EXCHEQUER,

&c. &c. &c.

SIR,

Satisfied that it would be as unpleasant to you as repugnant to my own disposition, I will not offend you with adulation; and, conscious of my inability to do justice to the subject, I consign the grateful task of describing your virtues and estimable qualities to biographers.

For prefixing your name to a work calculated to promote the health of British

# [ vi ]

British seamen, I shall make no apology; but, relying on your goodness to forgive the liberty I have taken in so doing, I beg you will accept this testimony of real gratitude for the condescension and great kindness with which, on various occasions, you have honoured me.

I am, with every consideration,

SIR.

YOUR MOST OBEDIENT, AND

MOST HUMBLE SERVANT,

R. ROBERTSON.

Royal Hospital, Greenwich, Marck 21, 1804 Admiral Sir THOMAS PASLEY, Bart.

Rear-Admls Sir ERASMUS GOWER, Kt.

AND

Sir JOHN-THO'S DUCKWORTH, K.B.

GENTLEMEN,

Many of the important facts recorded in this Volume will bring to your recollection the days of youthful ardour, and of ambition to obtain that rank which, by excelling in your profession, you now hold with so much honour to yourselves and advantage to your country; or to which you may yet hope to rise in the service.

They will, no doubt, remind you, that for the benefit of the sick, and for the pre-

prevention of disease, you were often called upon to render me all the assistance in your power on various trying occasions; while they renew in my mind the many reciprocal acts of kindness and friendship which happily have ever since passed between us, and which I have an honest pride in thus avowing to the world.

That you may long enjoy health, with every possible happiness, is the ardent wish of,

GENTLEMEN,

YOUR SINCERE FRIEND AND HUMBLE SERVANT,

R. ROBERTSON.

Royal Hospital, Greenwich, March 21, 1804.

### PREFACE.

THE favourable reception given to the author's different works, which were published in detached parts, as the subjects occurred to him in the course of his practice, while employed in the naval service, has induced him to revise and republish the whole, in this new edition, with various amendments and improvements. As care has been taken to free it from many of those inaccuracies which had crept into the first editions of his works, in consequence of being prevented by his professional duties from superintending the correction of the press. he submits it with the greater confidence to the public, and trusts that it will be found of more general utility, and be more more acceptable to medical readers, especially as his present situation has enabled him to add observations on the diseases to which seamen are liable in their retirement and old age.

In this edition, however, the reader must not expect either splendid theories, or specious quotations, to support the author's opinions. Animated by a desire to contribute towards the good of mankind, he has merely stated facts, without making any attempt to obtain the applause or the approbation of professional readers; being convinced that truth, even when clothed in the simplest language, will triumph in the end over the most seducing systems, which rest on no other foundation than the opinion of celebrated men.

If I have taken the liberty to differ from eminent authors, the only apology I shall offer is, that my opinions are founded on experimental facts, which have always been my only guide; as daily observation has shown me the fallacy and futility of theory when applied indiscriminately to practice. I hope, therefore, I shall not be accused of presumption when I assert, that practical inductions, drawn from these facts, give me reason to believe, that febrile infection depends on universal causes as invariable as human nature, and consequently that the cure must be conducted on immutable principles, which the most ingenious sophistry cannot affect.

An abstract of my observations made on the coast of Africa in 1769, appeared for the first time in 1771, in Dr. Lind's book on the Diseases of Hot Climates. My observations made on the same coast, in 1769, 1772, 1773, and 1774, under the title of A Physical and Meteorological Journal, were put into the printer's hands in 1775; but being then abroad, in America, they were

were not published till 1777. The first edition of my Observations on Jail, Hospital, and Ship Fever, from 1775 to 1781 inclusive, was published in 1781, and republished with large additions in 1790. In 1781, I published also a Political View of the indigent Establishment of the Navy Surgeons, without my name; but copies of it were transmitted to the naval members of administration. In 1790, my Essay on Febrile Infection was published; and in 1795, my pamphlet on Fermented Bark.

The reader who attentively considers the facts recorded in these observations, collected in various parts of Europe, Africa, and America, during an extensive practice for upwards of forty years, will be convinced that they are not the hasty production of a transient voyager, or cursory remarks made for the purpose of gratifying curiosity or filling up a leisure

leisure hour; he will be satisfied 'that I have not rashly started in my closet new opinions, in opposition to the great medical oracles of ancient and modern times; he will consider them, as what they really are, the result of many years diligent investigation of nature and of diseases in different climates, and be induced to receive, in a candid manner, the obvious inductions arising from them. In a word, I am inclined to trust, that he will not think me either daring or presumptuous, for speaking with some degree of confidence and boldness, on a subject to which I have devoted the greater part of an active and laborious life.

Should he, however, still remain a sceptic in regard to my opinions, I flatter myself that the time he may employ in examining them will not be altogether lost, as the facts on which they are you. I. b founded

founded form a valuable body of materials which are highly worthy of notice, and which must be of great utility to other practitioners who may be in similar situations.

In endeavouring to establish my opinions, deduced from these facts, I have met with that opposition which is generally experienced by every innovator in science. Dr. Jenner has had his opponents as well as Sydenham: I had no reason, therefore, to expect that an exception to a general occurrence would take place, in favour of my feeble efforts to promote the benefit of mankind. It, however, affords me no small degree of consolation, that men of professional eminence continue to applaud them, and that some who strongly opposed them, are now become their warmest advocates.

One motive for commencing my ob-

servations was, that by collecting facts I might be enabled to give a specimen of a plan for obtaining an historical register, and complete knowledge of fevers and other diseases incident to sca-faring people, as well as to those who reside on shore: for I conceived that such a plan might be extended with great advantage beyond the limits of navies and armies, to civil society in general, and might thereby tend to prevent the great, and too frequent mortality occasioned by epidemic diseases, particularly by febrile infection. I was also led to believe that the judicious and diligent practitioner would thus be enabled, by collecting facts, to distinguish himself from the obstinate and servile theoretic imitator; and that students who had acquired the rudiments of their profession, instead of wasting time on visionary theories, would

be induced to adopt that mode of treating diseases, which experience had proved to be most successful.

It is so obvious, that great advantages would arise to the public from such a plan, that it is needless to waste either arguments or time in proving it. A complete register or history of diseases, from their first attack to their termination, arranging the symptoms as they succeed each other, with a faithful relation of the treatment, whether successful or unsuccessful, would furnish young practitioners with accurate directions, as useful, in a medical point of view, as charts are in a naval, how to avoid errors and mistakes of the most dangerous nature. It is, therefore, much to be wished that a plan of this kind were generally adopted, and particularly by naval and other practitioners, who, in consequence of their situation, enjoy opporopportunities of collecting important observations; of displaying their talent for accurate discernment, and of showing humane attention to the sick. No adventitious circumstance or difficulty should discourage them from attempting it: when the object is to promote the public benefit, self-approbation is a sufficient reward; and it is to be remembered, that perseverance in a good cause seldom fails to surmount all difficulties.

As it is a received maxim in the science of medicine, that he who is desirous of practising with safety and certainty, ought to consider with great attention the air, soil, water, climate, and situation of the country, as well as the age, sex, and constitution of his patients, with their former and present mode of life, it occurred to me that it was no less necessary to pay attention to simi-

b 3

lar circumstances in my naval practice; and for this reason, in the prosecution of my plan, I imitated Hippocrates, and Huxham's Observationes de Aere et Morbis epidemicis.

But of whatever importance to practice the facts contained in this treatise may be, some readers may perhaps consider them as too trivial and minute; others, who despise diaries and cases, will no doubt think them useless in practice; but such readers ought to reflect, that it is from facts of this kind alone that true medical knowledge can be acquired; and that no circumstance, however triffing, which can tend to rectify error or to banish prejudice, is unworthy the notice of those who, enemies to quackery, systematic ignorance and false theories, which so often mislead, are desirous to establish their practice on the true basis of reason and truth. Unless every opportunity

nity be embraced of making diurnal observations, and of noting down the cases which occur, with the mode of treatment, and the eventual result, what benefit can posterity derive from the most successful practice, or from the knowledge of the greatest medical luminaries? By what other means can histories of diseases be obtained? Without diurnal observations and cases we might, as most of our forefathers did, continue to follow implicity the ipsi dixerunt or oral traditions of a few predecessors, conforming with servile obsequiousness to their maxims, however repugnant to the principles of physiology and pathology; and thus grovel on disgracefully to the end of our days, without having the courage to think for ourselves, or to benefit posterity by zealously disseminating and boldly asserting the truth.

b 4

In

In collecting the facts which compose the following work, I paid a careful attention to the different diseases as they occurred, noting down accurately the various symptoms which the patients complained of, and those which I observed myself, without ever trusting any thing to my memory. At the same time, I kept a faithful journal of the mode of treatment. Unless this part of the plan be rigidly adhered to, the successful can never be distinguished from the unsuccessful practice\*. But when the

\* Any person of common sense must know how to appreciate the labours of those who candidly submit to the public unsuccessful as well as successful cases, and to distinguish them from the labours of such practitioners as tell us, in a summary way, that "their mode of treatment was very successful, as they lost very few patients," leaving the reader to guess the number of their patients, the treatment of their unsuccessful cases, and the proportion of deaths, &c.; that is, leaving out what is most important.

methods

methods of treatment are fairly submitted to the reader's inspection, he is then enabled to decide which is the most eligible.

The author, who writes on a subject the general utility of which is allowed, naturally flatters himself with the idea of obtaining the public approbation. As the subject of my present labours comes under this description, I am induced to hope that the rectitude of my intention will make up for any defects which may be found in the work; and that it will meet with a favourable reception from those who prefer truth in the humblest attire, to the most specious theories which rest on no foundation; though presented in that captivating dress, which too often imposes on the credulous and misleads the inexperienced. Though unambitious of fame, I am not insensible to the stimulus of public

public commendation. To the generous mind it is desirable; it fans the flame of aspiring genius, and cheers the toil of laborious investigation: of the many, however, who strive for it, few there are who obtain the prize; and though this lotmay be mine, I can console myself with the reflection, that I have laboured in the best of all causes—to promote truth; and to promote the health and happiness of my fellow creatures.

This First Volume contains Observations on the prevailing Diseases on board several Ships in different places, from 1759 until 1769; and continued from that period almost until the end of 1774, for fifteen years, with medical and meteorological observations on board the Weasel, Æolus, and Rainbow; of which the medical part applies to fever arising from marsh miasmata, or marsh vapor;

vapor; to the successful method of treating it; and to the means of preventing it on the coast of Africa: which being the most important part, the record of facts is minutely related.

The meteorological part shows how far the health of scamen is apparently affected by climate; season; cold; heat; cold and moisture; heat and moisture; and by confined air occasionally in these situations.

The Second Volume contains Medical Observations, from 1775 until the end of 1790; and more particularly on fever arising in jails; hospitals; ships; and in other situations, from human effluvia.

The THIRD VOLUME contains an Essay on Febrile Infection; deduced from the data contained in the first and second Volumes.

The

The FOURTH VOLUME contains observations and brief Remarks on the Diseases incident to seamen from their youth, while employed in active service, to old age, during their retirement in Greenwich Hospital.

Pathological and comparative Tables, to show the efficacy of different modes of practice, are inserted in their proper places.

# CONTENTS

OF

## VOLUME I.

		GE
Introduction	٠	1
PART I.		
A Synopsis of Medical Observations, from 1759	)	
until June 1769, in various Parts of Eu	•	
rope, Newfoundland, and the West Indies	•	17
CHAP. I.		
Observations in 1759-60	•	ib.
CHAP. II.		
Observations on board of several Ships	•	21
SECT. I.		
Observations on board of the Prince of Orange	•	ib.
SECT. II.		
Observations on board the Terpsichore	0	32
SECT. III.		
Observations on board the Cornwall	٠	34
	0.0	0.00

	PAGE
SECT. IV.	
Observations on board the Adventure and Ferret	35
SECT. V.	
Observations on board the Preston and Diligence	40
PART II.	-
Meteorological and Physical Observations on	100
board his Majesty's Sloop Weasel, the	
Complement being 90 Men, &c. employed	40
on the Coast of Africa	43
CHAP. I.	
Meteorological Observations, from the 13th June	
until the 8th September 1769	ib.
CHAP. II.	
Remarks on the preceding Observations	59
SECT. I.	
A Review of the Sick Lift, from the 13th June	
until the Commencement of the Fever	ib.
unita the dominoneoness of the s	
SECT. II.	
Two Cases of Intermittents, and some Remarks	62
CHAP. III.	
	66
Of the Remitting Fever	
SECT. I.	
The Fever described in its mildest Form	ib.
	TOTA

CONTENTS.	xxxi
SECT. II.  Description of the Fever in its malignant Form	PAGE
SECT. HI.  Remarks on the Symptoms of the Fever in both  its Forms	72
SECT. IV.  The Method in which the Fever was treated.	76
SECT. V.  Cases of the Remitting Fever	79
SECT. VI.  Respecting the Cause of the Fever	85
CHAP. IV.  Observations on board his Majesty's Ship Æolus,  the Complement being 180, and augmented  to 200 Men, employed at Newfoundland	
SECT. I.	101
PART III.	
Meteorological Observations, and State of the Sick List, on board of his Majesty's Ship Rainbow	
CHAP. I.  Diary of the Weather, from the 30th December  1771, until the 26th August 1772; and	
State of the Sick List	. ib. HAP.

 		-	
	A	13	II.
==	A		
	4 A	4 .	ALC:

Diary of the Weather, from 30th November 1772, until the 24th August 1773; and State of the Sick List . . . . . . . 155

### CHAP. III.

Diary of the Weather, from 21st November 1773, until the 1st September 1774; and State of the Sick List . . . . . . 211

### PART IV.

The Monthly Review of the Sick Lift . 275

### CHAP. I.

Review of the Sick Lift, from the 30th December 1771, until the 26th August 1772 . ib.

### CHAP, II.

Review of the Sick List, from the 30th November 1772, until the 24th August 1773 - 289

### CHAP. III.

Review of the Sick List, from the 21st November 1773, until the 1st of September 1774 313

#### CHAP. IV.

The Table, shewing the Diseases on board of his Majesty's Ship Rainbow, in 1771, 2, 3, and 4, on the Coast of Africa and the West Indies; and the Number of Deaths . 343

CHAP.

	4	٠	ł
XXX	7	9	
A A A A	Į.	3	

### CONTENTS.

CHAP. V.	PAGE
On the Means of preventing Sickness on the Coast	
of Africa, as practifed successfully by the	
Author in 1773-4, and by those who have	
been since employed on that Coast	344
DADE W	
PART V.	
Observations on the most prevalent Diseases which	
occurred on three Voyages to the Coast of	0 # 0
Africa, in 1771, 2, 3, 4	353
CHAP. I.	
On the Remitting Fever	ib:
•	
SECT. I.	
Arrangement of the Subject	ib.
SECT. II.	
The Remitting Fever described	357
interior against the second se	
SECT. III.	
Remarks on the Subject	363
CHAP. II.	
The Management of the Fever	266
The Municipal of the 1 cool	300
CHAP. III.	
Cases of the Fever	377
arow t	
SECT. I.  Cases of the Fever at St. Jago	ib.
Cujes of the recei in oi. jugo	10.
SECT, II.	
Cuses of the Sierra Leon Fever	381
VOL. I. C	ECT.

xxxiv	CO	NTE	ENT	S.				
		SECT.	TIT					PAGI
0.6.6.7	7							000
Cases of the	rever a	t St. Th	omas's	5 .	•	•	٠	392
		SECT.	777					
0 6 6 17	~			7				433
Cases of the	e Fever o	m the jed	cona v	oyag	е.	•	٠	411
		SECT.	7.7				1	•
C. C C 12	T							414
Cases of the	rever of	n the laj	t voy	age		•	•	414
	Т	PART	VI					
0 17 70.0								4.00
On the Dyse	entery.	• •	• •	•	•	•	٩	427
		CHAP.	т					
Ou the Duf								ib.
On the Dyse	eniery in	aissereni	rar.	2 6	1	•	•	10.
		SECT.	Y					
The Dysente	000 A C A			Fam	aica	, 1	70	
	* *			_		, 4	<i>t</i> =	21.
Jeribea		4 4	• •	•	•	•	٠	ib.
		SECT.	II.					
The Dysente	nn doloni			1000	d +.	o +1	ha	
				_				400
Southu	ard of t	pe Equa	tor .	•	•	•	٠	430
		SECT.	III					
D. A. Giorge								100
Reflections of	n ine Dy	jeniery	• •	*	•	•	•	432
		CHAP.	H.					
On the Trea								435
On the Irea	imeni oj	Dyjeme	<i>y</i> •	•	•	•	•	400
		SECT.	Τ.					
Observations	on differ			c				ib.
Objervanions	on aijjer	CHE IVIC	uicines	•	•	•	•	10.
		SECT.	и.					
The Method	in which			7910	stra	nte	1	4.37
TING TATCHINGE	VII WIVIUW		chici	wu.	, ,,			
							SE	CT.

CONTENTS.	XXXV
SECT. III.  Cases of the Dysentery at Jamaica	PAGE
SECT. IV.	
Cases of the Dysentery to the Southward of the	
Equator	458
CHAP. III.	
Jun.	473
CHAP. IV.	
	476
CHAP. V.	
On the Venereal Disease	478
Recapitulation	480

### EXPLANATION OF THE JOURNAL.

THE 1st column, beginning at the left hand, denotes the time. -2d, Hours. -3d, The height of the thermometer. The first thirty-three days of the Rainbow's first voyage, the thermometer hung in my own cabin in the cockpit, and afterwards in Captain Collingwood's aftercabin; in a medium between the atmospheric air, and that on the lower gun deck, in which the ship's company flept; neither exposed to the atmosphere nor fun. It is noted commonly at 8 a.m., at noon, and at 8 p.m., and also at 4 p. m., when there was any remarkable alteration of its height. When there was a fire in the steerage, an f follows the degree of heat; and an s follows its height when it was exposed to the fun's rays.—4th, and 5th, The latitude and longitude are marked by degrees and minutes. Sometimes names of places are inferted in the former column. The latter generally expresses the longitude made from Greenwich; but fometimes only the difference made last twenty-four hours: they are always diffinguished however .- 6th, The age of the moon is marked daily .-- 7th, The winds are denoted by the common initials; v. for variable; l. b. for land breezes; and f. b. for fea breezes: and the quantity by stars; one \* calm, or very light breezes; \*\* fresh breezes; \*\*\* fqualls and fresh gales; \*\*\*\* denote very hard gales .- 8th, Rain is denoted by points: very light showers by .; showers by ..; heavy showers by ...; very heavy rain by ....; dews by a mark in the fame column —9th, The appearance of the atmosphere is denoted by c. for clear; cl. for cloudy; h. for hazy; t. for thunder; and l. for lightning; a. m. fignifics before noon; p. m. fignifies afternoon: and m. fignifies noon.-The state of the fick list, with other remarks, are inferted on the page facing the Journal.

INTRO-

# METEOROLOGICO-MEDICAL OBSERVATIONS

MADE IN

EUROPE, AFRICA, THE WEST INDIES,

AND

NEWFOUNDLAND,

FROM THE YEAR 1759 TO THE END OF 1774.

#### INTRODUCTION.

Experience being all the demonstration which the Practice of Physic can ever furnish, a previous knowledge of those branches immediately connected with the Science of Medicine is necessary to prepare us for improving the opportunities we may have to acquire it. Experimental truth, which is indeed obvious, is in the Medical Science what demonstration is in the Mathematics. If in the latter some propositions are more tedious and difficult in solution than others; in the former the history and successful manner of treating certain diseases are more difficult to be understood, explained, and established,

established, than others, and some are so abstruse that they are even still unknown to us. To infift therefore on the importance of accurate observations. is needless; for it is to these we owe all the practical knowledge we have in Medicine. By thefe are we enabled to trace the flow and irregular progress of Medical Science, from its rude beginning to its prefent improved, though still very imperfect, state. No other mode to acquire and afcertain experimental truth in Therapeutics, than by collecting, and collating with fidelity, observations on difeases, and the eventual fuccess of different treatments, having yet been discovered, it certainly behooves every practitioner to contribute his best assistance to enlarge the flock. It may be prefumed, as an inducement thereto, that the most experienced and faithful Obferver will be esteemed the most eligible Practitioner\*.

In practice, however, the fuperior knowledge of the experienced, candid Phyfician furnishes no good reason for exultation over the young and inexperienced, because, he is to recollect, that he was an inexperienced theorist at the commencement of his own practice. What faith and good works are in morals, theory and experience are to be considered in the practice of Physic. Whoever attempts

This is beyond doubt and uncertainty; because every mode of medical treatment, founded on theory or hypothesis, being very insufficient, has, like the theory itself, given place to a new one.

to fplit or feparate these is no more a friend to the fcience of Medicine, than he is to Religion, who attempts to divide faith from works, or works from faith, in the duty of a Christian. If to fulfil the Christian duty, it be effentially necessary to prove works by faith, and faith by works; it is equally necessary for the Physician to prove his practice-by his theory, and his theory by his practice.

On the other hand, the young Physician who has just obtained his degree, admitting he has done it with great credit at the university, should not suppose himself the eminent Physician the moment he leaves college. Because the fact is, whatever he may think, he has only, as yet, qualified himfelf for the school of practice, wherein he is to learn or acquire the experience, which is to form his character, and establish his future reputation. Of this truth he will foon be convinced, by finding himfelf compelled to call in the affiftance of an experienced practitioner. He will be convinced that the history of a difease obtained by his own observation, at the patient's bed fide, and from his mouth, prefents ideas of the difease very different from what his reading in his closet had done. For the dignity of the profession, both experienced and inexperienced practitioners should support and respect each other.

That improvements and even discoveries in medical practice have been prevented by animofities, jealousies, illiberality, and want of candor among B 2 profes-

professional men, will not be denied. If these unworthy passions debase the profession, in what contempt and dishonour must malignity and revenge, with their concomitants, involve it! Whilst such illiberal passions, amounting almost to hostility, actuate the members, is it to be supposed that they can be equally respected as those of the other learned professions are? If animosities, want of candor, and of liberality amongst them, are too obviously a bar to the rifing dignity of the profession, they are not less so to the improvement of the medical science and the reputation of its professors. Though the science comprehends various branches, each of which, particularly in the metropolis, is fufficient to afford employment to any reasonable man, and to encourage him to aim at excellence, it is no uncommon thing to fee an individual striving to grasp within his practice all its branches; by which means it is hardly possible he should excel in any, or promote the science. In general, how fincerely, therefore, is it to be wished that all such unworthy passions should be banished, and give place to candor, benignity, liberality, and public spirit amongst us. How highly would such a temper and disposition tend to preserve the dignity of the profession, to improve the science, and to promote the benefit of mankind?

But I shall proceed to mention fome other obsta-

cles to the improvement of medicine, and the dignity of the profession.

The first I shall notice is the disingenuousness of medical authors, in endeavouring to suppress, instead of promulgating, the works of those men, from whom they have received the best proofs of successful practice, with much information on the subject. This arises either from an idea that they will lessen their own, by making known the just merit of others, or from a vain desire to be thought the original authors. This, no doubt, tends to retard the improvement and dignity of medical science; whereas a manly, candid, and liberal acknowledgment would redound as highly to their own honour, as to the credit of the discoverer, and the benefit of the public.

The theories, hypothefes, and dogmatic doctrines, which are impressed on the minds of medical students by their teachers\*, instead of experimental facts, serve only to retard the improvement of science. The bad consequences of this improper method of instruction are many; for the pupils become wedded to particular opinions, however erroneous, and so installated with their teachers and the favourite authors they recommend, that they consider them as infallible, and treat every person who avows a contrary opinion as a sceptic or medical insidel.

<sup>\*</sup> The late Dr. George Fordyce has made the same complaint.

Medical writers also, instead of coming forwards with a fimple narrative or plain history of the fymptoms of the difeafe, as they occured, and giving a faithful account of the manner of treatment, and a just statement of its success, so as to enable the reader to judge for himself, are too apt to act in a very different manner. Sometimes they obtrude on him a laboured theoretic disquisition on diseases, and sophistically blend much borrowed theory with a little observation, on purpose to make it be believed, "that through extreme diligence, and by most acute discernment, they have fortunately discovered a new fever, and that by the most wonderful ingenuity they have fortunately hit on the only method in which it could have been fuccefsfully treated." This method certainly retards improvement, as, instead of a new fever, some of these writers have imposed on the inexperienced and credulous reader a fymptomatic fever,—a fever arifing merely from topical affection, peculiar to the fituation in which they practifed.

Some writers introduce oftentatious and misseading quotations from authors, whose erroneous theories and practice they vainly imagine will fanction their own: as if the errors of others could stamp theirs with veracity. Whether the errors were accidentally fallen into at first, and, from pride, have been persevered in, is best known to themselves. At any rate they appear to retard the dignity and

improve-

improvement of the science of medicine, by sacrificing to vanity, instead of endeavouring to acquire merit by their own industry and observation.

Many practitioners and writers have a fummary method of confounding and jumbling their favourite theories with the observations of others, purposely to be thought the authors of the observations.

To these obstacles to medical improvement may be added the heat and animosity with which medical controversy is conducted.

The practice of those sciences, which, as already observed in regard to medicine, do not admit of mathematical demonstration, furnishes great latitude for debate. As it is therefore possible, that the disputants may err on both sides, there cannot be any solid ground for supercilious replications, or positive triumph. Much less reason is there for their maintaining against each other rancorous envy and malignity. The intelligent reader, disgusted with such animosity, throws the work aside; so that, however useful it might have been considered had it breathed the spirit of moderation combined with instruction, the intention as well as labour of the author is defeated \*.

\* This remark does not apply to fever, on the subject of which the universal prevalency, the great similarity, and there being but one successful principle for conducting the cure upon, as demonstrated by faithful registers and arithmetical calculations, remove every doubt.

The

The implicit confidence placed in the writings of fome of the ancient and modern authors has also obstructed medical improvement. abfurd length have many been carried by their fuperstitious fondness for them, that they have imagined nothing more remained to be faid, or to be known on the subject, and that any further observations on difeafes would be fuperfluous. who have had spirit to think otherwise, and to fwerve from the precepts of these medical idols, have been branded as professional infidels; as if those theoretic opinions and writings contained all that is needful to be known of the history and treatment of difeases with as much certainty as the sacred writings contain every thing needful to be known and practifed for our falvation. These indeed contain axioms felf-evident; prophecies, of which many have already been fulfilled, while the rest are daily fulfilling; with the plainest divine and moral instructions that could possibly be given to make us happy. They contain never-failing comfort to the wife and the good under every affliction. But though the writings of Hippocrates, with those of other medical idols, both ancient and modern, have long overfpread a great part of the world, how little of febrile infection, and of the possibility of treating it fuccessfully upon one invariable principle, has, until of late, been known? Even at prefent how confined is this knowledge? and how little of many other

other diseases is yet known? Does not febrile infection\*, at this day, render fleets useless, moulder armies away, depopulate garrisons, and decide the fate of nations? Would such consequences have happened had the disease been understood, and a successful method of treating it been known by the ancients or moderns, who, instead of observations, experience and successful practice, have held up to us for our guide incongruous theories and hypotheses? Shall we still, as if infatuated, continue to tread in their footsteps, though marked with devastation? Let us rather use their writings and practice, as mariners do beacons and lighthouses, to warn the uninformed of shoals and rocks, upon which thousands of our predecessors have split.

Besides these obstacles to the improvement of Medicine, which, to our discredit, are entirely of our own creation, many occur in practice which it is not in our power to remove or to obviate. The passions, the prejudices, the weakness, and impatience

<sup>\*</sup> History furnishes many irrefragable proofs that infectious diseases have in all countries, and at all periods, been ranked among the severest calamities incident to mankind; and that of this destructive class febrile infection has been invariably found the most tremendous and fatal foe to human existence. Some infectious diseases visit man but once in his life, some are periodical, and some are endemial only; while febrile infection, again and again attacks the whole race of mankind in all climates and seasons, without regard to age or sex; and with its secret malignancy sweeps away a far greater proportion of the millions that perish in the fleets and armies of contending nations, than do all the destructive implements of war.

of the fick, of their relations, and of their friends, befides our being at the mercy of feveral others, are altogether fuch powerful obstacles to medical improvement, that any liberal-minded person might imagine that professional men would unite in the closest ties of candor and friendship, which would bear down every opposition to successful practice, to the reputation and honour of the profession.

Having mentioned numerous obstacles to medical improvement, to which many others might be added, I cannot help noticing, in opposition to the opinion of some eminent professional characters, what I think would be the most effectual method for its improvement; I mean the publication of a faithful medical Ephemeris or Diary. The argument brought against this method, "that cases may be feigned," has with me but little weight, unless fuch opponents can point out a more certain method of attaining fo defirable a purpofe. among professional men there may be a few without probity and candor, it does not follow that a great number should be suspected of being so. Far, far from us be fuch illiberality. The defire of obtaining fame by false means will never, in the estimation of honest men, outweigh the only just and certain means to deferve it-adhering stedfastly to the path of rectitude, and to truth.

Impressed with this opinion, for upwards of forty years I have been collecting the materials which compose this work: during that time I have enjoyed

enjoyed a very extensive field for observation in three quarters of the world. At my first entering this field, however, I own I was almost deterred from executing my intention to collect observations; for, according to the fystems of professional writers, human life appeared too short for composing a Nosology only; nay, thousands of years, I found, had been infufficient for that purpose. Besides, obferving Nosologists to differ widely among themfelves, I faw eminent practitioners adding new fevers annually to the already numerous collection: fo that, instead of being instructed by those writers, I was bewildered and perplexed in their mazes of theory and hypothesis. Thus circumstanced, I had no other alternative than to think and act for myself; to attend the fick diligently, and to note down every medical cafe which might occur to me in every country, climate and feafon: from the execution of which plan, for many years, I own the information I derived far exceeded my expectation. In the purfuit of it I was enabled to ascertain, that febrile infection, whether proceeding from marsh miasmata in Africa and the West Indies, or from human effluvia in jails, hospitals, ships, camps, or in other confined situations, in Europe and America; comprehending all the nominal fource of febrile infection, and all the varieties and nofological distinctions of fever-exanthematous or fymptomatic fever, and what arifes from

from topical affection only excepted\*—whether appearing in fpring, fummer, autumn, or winter; whether the fubject be young, or old; I was enabled, I fay, to afcertain that febrile infection is the fame universal idiopathic disease. And I was the more directly led to this inference from having observed, that there is but one principle, upon which the cure is conducted successfully throughout the universet. This inference, being founded on faithful observation and experience, becomes, in fact, the fairest and most obvious philosophical induction, and is proof against the most specious sophistry.

I was also, thence, enabled to infer that febrile infection has been in all ages, and in all fituations, one and the same idiopathic disease, differing only in virulence and mildness according to circumstances; which inference is daily confirmed by its being successfully cured ubique gentium, every where, upon one philosophical principle of supporting and stimulating the vital energy.

Practitioners affirming that this or that fever is not infections, or that bark will not cure febrile infection, admitting their observations are correct, no more invalidates the doctrines of the

univerfality

<sup>\*</sup> My exceptions have been always those which Dr. G. Fordyce has lately published.

<sup>†</sup> The Brunonian system is a proof of the justness of these inferences, which he founded on a much slighter incident than the experience from which mine originated.

universality of febrile infection, and of its being cured every where on one general principle, than their faying that finall-pox is not infectious, or that hydrargyrus will not cure syphilis, invalidates the general belief, that the one is infectious, and that the other will cure fyphilis, because individuals have escaped the former, even after inoculation, and fome individuals have not been cured by the latter not having been administered to them, in a manner adapted to the idiofyncrafy of their fystem. The fact is, that constitutions, unless they are predifposed to be infected\*, will resist any infection: and there are constitutions of which the idiofyncrafy is fuch, that it is difficult to exhibit certain medicines in a form agreeable to them. But these are exceptions; which do not often occur, nor militate against general rules and laws. Besides, when fome practitioners fail in obtaining both those ends, other practitioners fucceed with the fame means; which is another evidence in support of my argument.

<sup>\*</sup> Had Providence not mercifully ordained this law, every person who approached infection must have inevitably been infected. But by this merciful ordination of the Almighty, we see people daily attending the most infectious diseases with impunity. They, however, have no more merit in doing so, than they have in being tailer than other men. Nor have strong men any more reason to boast of their nerves, than they have to boast of their complexions. These are gifts from God only, and are not acquired; nor to be imputed to them as a merit.

At different periods, as the opinions and theories of fever have been various, the indications of cure, and the method of treatment, have varied accordingly. But from its being generally understood, that fever is either the immediate cause or effect of inflammation, it was concluded that the cure was to be obtained only by evacuations and reducing the general strength. The choice likewise of the most proper means to effect that purpose has been a fource of much contention amongst medical professors, to the great perplexity of young practitioners. Confequently, as their theories have been at all times incongruous, their practice has been eventually unfuccessful. Thus circumstanced, as to inftruction from others\*, I was compelled to adopt a method of treating febrile infection, deduced from my own theory of the difease, which observation and experience alone had furnished me with, and pointed out as before mentioned.

\* The first edition of Dr. Lind's book, on Hot Climates, was published before I sailed in the Weasel; but I knew nothing of it until we returned to England. And I knew nothing of Dr. Miller's valuable works; nor of Dr. Clark's accurate Observations on the Diseases incident to Seamen on long Voyages—the former, partly, printed in 1770, and the latter in 1773—until my return from America in the end of 1778.

The doctrine of fever being an universal, idiopathic, infectious disease, has also lately been published by the late Dr. George Fordyce, in his first Dissertation on Fever. This is a very important testimony in favour of the author's doctrine, which he published many years ago.

The

The difference between descriptions of diseases compiled from books and theory, and those descriptions composed from practical observation, is at least as great as the difference between a translation and an original. The learned compiler presents his reader with the relation of diseases as he implicitly received it, with his own commentaries: whereas the practical historian lays before his reader those circumstances or symptoms only which occurred to his observation, and which the reader is to expect to be demonstrated in his own future practice.

The compiler, in my opinion, may fitly be compared to one reprefenting an imperfect, prospective view of an edifice, of which perhaps he had never seen the original. But the practical author, who relates his own observations, brings the reader close to the object, and takes him, as it were, through every part of the building, and impresses the images on his mind so strongly, that he is never after at a loss to recognize them when they occur in his own future practice.

In like manner, the author trusts that his plain history of diseases, in the following pages, will be found more durable, and of far greater utility to mankind, than the most superb compilations of theory, ornamented with quotations and all the elegance of diction.

PART



## PART I.

### A SYNOPSIS

of Medical observations from 1759 until . 13th of June 1769, in various parts of europe, newfoundland, and the west-indies.

### CHAP. I.

Observations in 1759-60.

In the fuccessful event of the first fever case which I ever attended, I was particularly interested. It was a fever of the tertian type, and occurred \* in the early part of my studies. The patient fortunately recovered, though treated with antimony. This I remarked, because I had then read and heard that fevers of the intermittent type were to be cured by bark; and this case being one of that type, I could not conceive why the bark was not administered; not knowing that, according to the theory of many professional men at that time, intermittent fevers not only cure themselves, but are to be

\* Early in 1759.

confidered particularly falutary to people past middle age. The physician, therefore, in whose management the case was, thought proper only to vomit and purge, and to administer diaphoretic antimony as a sudorific and febrifuge, leaving the rest to the vis medicatrix naturæ; so that the patient had a tedious recovery\*.

Patrick Gray, aged about 40, was affected, in June 1759, with a relapse (after having recovered about three weeks) of intermittent fever; the relapse was induced by hard labour, while he was yet weak. He now complained of palpitation of the heart, of nausea, costiveness, flatulencies in his bowels, lassitude, and of immoderate sweats towards A.M. He took an emetic, and the following mixture; in the paroxysm. He was not materially relieved; his appetite failed, and he complained of a four taste in his mouth. His stomach was perceptibly swelled in the morning, but gradually became less so towards night, when his legs swelled. He used bitters, and took four deobstruent pills, composed of rhu-

<sup>\*</sup> The physician who managed this and the seven following cases was one of those practitioners whose dependence is on antimony and the vis medicatrix nature. But surely it never can be proper to keep patients beyond the middle age on such debilitating medicines and low diet. The many who sink under this treatment, and the great length of time which patients, so treated, require to gain their strength, show the great impropriety of it.

<sup>†</sup> Sp. lav. c. corn. c. a 3ij. tinct. theb. castor. a 3i, M. Dosis gut. xxx—xl. ex quovis vehiculo palpitatione urgente.

barb, aloes, myrrh, vitriol. tartar, and oil of mint, formed into a mass with syrup of roses, of which a drachm was divided into twelve pills.

I feldom had an opportunity to fee him afterwards: but he foon died of dropfy.

The other cases which came under my observation this year were, one with ophthalmia, one with icterus, one of hypochondriasis after a wound, one of scrophula with ulcer, one of consumption (phthiss pulmonalis), and one of dysentry.

The case of ophthalmia recovered by the frequent application of compresses dipped in lime-water only, which showed the cause to have been debility.

The icteric patient was cured by an emetic, faponaceous pills, and lime-water.

The cure of the hypochondria was effected by an enema, a rhubarb draught, tinct. facra, and cardiacs.

The patient with fcrophula was recovered by calomel, purges, and washing the ulcers with limewater.

The confumptive patient died. He took half a drachm of magnetia daily for fome time; and licked frequently a little of spermaceti and candied sugar rubbed together. Flowers of sulphur at times, and pectoral pills morning and evening, were prescribed; and also four ounces of the decoction of seneka with liquorice root, three or four times a day: in the latter stage of his illness he was twice let blood.

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The

The dyfenteric case was rather bloody stools, occasioned by an accident, than real dysentery. It was induced by his carrying a very heavy load, which most probably ruptured a blood-vessel. The symptoms, eight or ten days after the accident, were frequent bloody stools, accompanied with sever, inquietude, gripes, and tenesmus. Towards the fatal termination, he was afflicted with strangury: and the stools were of a gelatinous consistence and appearance. An electuary, composed of rhubarb, scordium, and opium, with lime-water, and two grains of pulv. ipecacuanhæ made up in a pill with tinct. op. were prescribed.

In the fummer, 1760, I was employed as furgeon of one of the ships belonging to Dundee, on the Greenland sishery: of this voyage, which lasted four months, I unluckily lost my journal. But very few complaints occurred amongst the people, all of them being well clothed, well victualled, and the voyage short. One man, however,

R. Finlay, aged about 25, complained of an intermittent fever. He had had two fits before he applied to me. I ordered him a vomit, which also operated by stool, and the Peruvian bark to be taken freely during the intermission, and he soon recovered perfectly. This was the first case of sever that I ever had under my care.

## CHAPTER II.

#### SECTION I.

Observations on board His Majesty's Ship Prince of Orange.

IN SEPTEMBER 1760, I entered into His Majesty's fervice; and on the 24th Jan, 1761, was appointed one of the mates of the Prince of Orange, a fourth rate, with a complement of four hundred men, employed on channel fervice at the reduction of Belleisle. Part of the time I was on shore on Belleisle with the fick, in a tent. The most remarkable cases which occurred in the Prince of Orange, 1761-2, while I was on board, were, one of putrid fever\*, one of fever, two of pleurify, two of fmall-pox, one of hepatitis, one of epilepfy, four of fracture, one of concussion with contusion, two of contufion, one of gun-shot wound, one of lacerated wound, one of diflocation, one of fuffocation, and two of fcorbutic ulcers. But of chirurgical cases and fyphilis it is not my intention to take any notice, further than to mention them occasionally as forming parts of the fick lift.

J. Bridgeman, aged about 38, a very frout man, complained, on the 14th March, of great difficulty

<sup>\*</sup> I speak here in compliance with the custom of those times.

of breathing, pain of his breaft, and urgent thirst. The pulse was quick and full. He was let blood, and pectoral medicines were prescribed. 23d. The fever, after having abated, returned with fevere cough. Venefection and pectorals were repeated, and a cumin plaister laid on his breast. 30th. He was not relieved. Eruptions were discovered on his skin, which he had studiously concealed for some time, as be acknowledged; and also that he had been taking medicines privately for venereal complaints. eruptions were rubbed with fulphur ointment, and a dose of purging falts were now and then ordered; besides an electuary composed of garlic, oxymel of fquills, and liquorice powder. 27th of April the eruptions were become flattened and more livid, and his right eye inflamed. 26th of May the bases of the eruptions spread, but did not rife above the skin. Vesic. inter scap. applicatum erat.; linct. adhuc utitur; et artus ejus sp. vin. camph. illiti erant. He died the 5th June. The feverish fymptoms and pain were much relieved by the first bleeding: but after the fecond he became much worfe; and it was then the eruptions were first observed, though they probably had long before made their appearance. They were confidered fyphilitic\* however.

John Williams, aged about 19, complained, in April 1761, of head-ach, great pain in the right

This poor man's case was certainly mistaken, and mismanaged.

hypo-

hypochondrium\*, of costiveness, and gripings in his The pulse was quick and full. V. S. et pulv. rad. rhabarb. 3fs. tertia quaque die cepit; et etiam clyfma, ut vifum, erat injectum. He recovered in a few days: but the fame complaints returned about June the 7th with more violence. V. S. et pulv. rad. rhab. ut antea cepit. 8th. No better. 9th. He complained of violent pains in his bowels. Iterum iterumque V. S. et pulv. rad. rhab. repetebantur. 17th. He complained of dyfuria and fuppression of urine; and there was an exacerbation towards night. 26th. He was fent on shore at Belleisle. Costiveness, retching, pain of his breast, with cough, difficulty of breathing, pain in the right hypochondrium, suppression of urine, and dysuria, were urgent. Pil. deob. cum ex. cicutæ et diæta lactea ntitur.

He was feized with an intermittent fever, which was carried off in a few days by the Peruvian bark, and he recovered.

DAVID ROBETHON, aged about 28, had been feverish, with purging, for some days, of which he recovered. But from drinking hard, the purging returned the 8th April, accompanied with severe gripes, especially when at stool, with thirst and nausea. 9th. He was not relieved by vomiting. 10th. He slept little in the night, and A. M. was delirious; the dysenteric symptoms continued, the pulse

<sup>\*</sup> The disease was undoubtedly an affection of the liver.

was quick and strong, the tongue parched, and the thirst urgent. 12th. Delirium and stupor. 17th. The other symptoms continued, and the pulse sunk. 19th. He seemed better. The pulse was scarcely perceptible in the right arm, while it was tolerably sull in the left. 22d. The stupor went off, as did the subsultus tendinum, which had been observed for some days. 24th. He was recovering; but was soon after seized with phthis pulmonalis, and died. During his illness he was let blood sour times; rhubarb with lenitive electuary was repeatedly given, blisters were applied to his neck and ankles, cataplasms were applied to his feet, and he took castor, saffron, and weak cordial medicines and bitters twice a day.

ABRAHAM HOUSE, aged about 37, complained, the 4th August 1761, of great lassitude, stiffness of his joints; of ædematous swelling of one leg; of sore, spongy, and putrid gums; his breath was very fetid; his countenance bloated, pale, and squalid; and small spots, like slea-bites, appeared on his legs, which were rough like goose-skin. 27th and 31st. He complained of great pain in the breast, of difficulty of breathing, and cough, which were increased by motion, and the pulse was quick and small.

Eight ounces of blood were taken from him twice, and he took various medicines; but he owed his recovery to vegetables.

When we returned to Belleisle from a long cruife

in the Bay, upwards of an hundred of the ship's company were affected with scurvy; but fresh provisions and vegetables were so liberally supplied to us, that only one man died of it. The symptoms, which I noticed at the time, I have arranged as they occurred in the following manner.

The fick, at first, complained of pains in their bones\*, of lassitude; that their legs, on which appeared small red spots like slea-bites, swelled towards night; and that their gums were fore. Their faces appeared bloated, fallow, and squalid, and their breath was offensive.

This was confidered the first stage of the disease; after which

The laffitude increased; the swelling of their legs continued all night, and was dropsical; the miliary spots spread; the glands in several places were indurated; their gums were spongy, enlarged, loose, and bled on the least touch; their breath was very fetid; their countenances became more fallow and squalid; and they complained of cough, which occasioned pain in their breast, that increased on the least exertion, especially towards night.

These were considered symptoms of the second stage.

In the third stage they lost all power, as well as inclination, to move, and could scarcely bear to be moved in the most gentle manner without fainting;

<sup>\*</sup> In describing cases I use the patients' own words frequently.

the dropfical fwellings and indurated glands inflamed and broke out into foul ulcers, that difcharged a thin bloody ichor profufely. The miliary fpots fpread more and more, became livid, and bled profufely on the leaft fcratch or excoriation. The gums were fo putrid that their teeth dropped out, and their breath became still more offensive. The cough, with pain in the breast, was more constant and violent. They frequently had a smart fever, especially towards night; their countenances were ghastly; and the patient who died voided copious, fetid, purging stools immediately before death.

The blood let in the first stage consisted of a preternatural quantity of loose, black crassamentum in little ferum.

In the fecond stage the crassamentum was looser, blacker, and less in quantity; while the ferum, which was now of a bluish tinge, with scum on it, was proportionably increased.

The craffamentum in the third stage was only black gore scarcely adhering together, in a variegated serum, with a greenish scum. When poured out of the bason, what remained in the bottom resembled the grounds of coffee.

THE ulcers of the men who happened to be feized with fcurvy produced a black, fpongy, or funguous excrescence daily \*, and discharged profusely a thin blackish fetid ichor; they bled pro-

The sick compared it to bullock's liver.

fusely on the least touch. Topical applications produced no beneficial effect, until the general fystem was repaired.

THOMAS YELTON, aged about 30, whose lower jaw had been fractured, and a perfect callus formed before he was seized with the scurvy, had the callus again dissolved by it.

John Gardiner, aged about 25, complained, the 10th October 1761, of violent pain in his right fide, which was greatly increased by frequent cough. The pulse was hard and full, and he was costive. V.S. cath. cepit, et ut visum linct. pect. paux.; et etiam latus dolens lin. sapon. illinebatur. The 3d day of his illness he found himself relieved in the morning; but an exacerbation came on in the evening. V.S. et pulv. sal. nitr. pur.  $\Theta$  i. in potione sua quaque hora sumit. 4th. Great inquietude; rep. cath., et laudan. liq. gut. x. h. s. cepit. 5th. It was supposed his complaint proceeded from external injury.

14th. Had three violent exacerbations fince the 5th, with coffiveness. The paroxysm was brought on to-day by wine, which his messmates gave him. V. S. ut visum; et lact. ammon. nitr. clysmat. vesic. aperient. utebatur. P. M. his urine was cloudy, and he was somewhat relieved. 15th. In fix hours after the last blood-letting a violent exacerbation, with delirium, convulsions, parched tongue, and infatiable thirst, came on. V. S. et vesic. erant repetita. Two violent exercerbations of dyspnæa; pain and cough to-day. V. S. iterum.

17th. The pulse was small and very quick. Rep. V.S. Delirium. 18th. Pulse rather smaller, headach, pain in the breast, with insatiable thirst. P. M. the pulse became small and sluttering, and at sive o'clock he was seized with syncope and expired.

On the 8th day of his illness an equable perfpiration broke out on him, but never afterwards.

In December the fmall-pox made their appearance.

Benjamin Steven, aged about 12, complained of head-ach, pain of his back and bones (on the 10th of December). The pulse was quick and full. Twelve ounces of blood were ordered to be taken from him, and an emetic to be given. The second day of his illness he was comatose, delirious, and speechless. An eruption appeared on his face and extremities. His pulse was hard and full. Rep. V. S. ad 3x. et cath. cepit; dein vesic. inter scap. app. Admitted nothing into his mouth. 3d. The pulse was quick and small; hiccough, and rattling of his throat came on, and he died at midnight. Unfortunately this boy lay down in the cockpit, where the air was very confined.

THOMAS SALMON, aged about 39, complained, the 9th of January 1762, of fevere head-ach, and violent pains in his back, loins, and bones. His pulfe was quick and fomewhat full. V. S. 2d of his illness. He continued much the fame, and took a vomit. 3d and 4th. No alteration. 5th and 6th.

Small-

Small-pox appeared all over him. 7th and 8th. The eruption of the confluent fort continued. Very little fever. His drink was acidulated with vitriolic acid. 9th day. The face much fwelled, one eve closed, the throat much inflamed, tongue blackish; the fever moderate, and falivation copious. The fever and thirst greater; throat much stuffed; an exacerbation comes on regularly towards night, but the fwelling and ptyalifm continue. Pulse quick and small, faintness, great thirst, incontinence of urine; pustules flat on the tops, and ptyalism stopped. R. Croc. Brit. 7ss. aq. mirab. Zifs. aq. com. Zvi. fyr. alb. fiat julepum. Dof. coch. ij. fecundis horis; et in dof. noct. tinc. theb. gut. xvi. cepit. P. M. the pulse was fuller for some time; but he was more reftless, and comatose. Deglutition became more difficult, with rattling in his throat. He was speechless at midday, and died about one A. M.

Several of the young gentlemen on board had the small-pox at this time, and recovered. They all complained of being seized with head-ach, pain in their back and bones, and nausea, with heat, thirst, quick pulse, and restlessness. Before the eruption a slight degree of delirium came on, which went off with the sever, when the eruption was completed. V. S. Emetica; cathartica; fal nitrex potione commune; julep. croci, ut supra præscriptum; anod. h. s.; diæta tenuis; et post pustularum

larum desquamationem cathartica, præscripta fuerunt.

Peter Collins, aged about 30, on the 15th of February 1762, being in liquor, when eating his fupper, a bit of theat fluck in the pharynx, and fuffocated him before affiftance was called. The meat was pushed down into the flomach; he was let blood, and other means were ineffectually tried to recover him \*.

WILLIAM LINDSAY, aged 30, the cook's-mate, in cleaning the ship's coppers the 19th of March, fell suddenly backwards, muttering unintelligibly. The pulse was much oppressed and irregular, and he was so violently convulsed, that a vein could not be opened; but as the convulsions continued increasing in violence and duration, and as nothing could be got into the stomach, the surgeon thought proper he should be let blood from a large orifice. During this operation, the whole system was in such violent agitation that the blood flowed per saltum, as if from an artery: near two pounds of blood were taken away†. The surgeon, from such an instance having occurred to him before, supposing the patient had been affected with the vapour arising

<sup>\*</sup> But the means now made use of for resuscitation were not known then.

<sup>†</sup> In bleeding him the tendon of the biceps was pricked, which occasioned violent inflammation and suppuration of the arm.

from verdigris about the coppers, ordered him fome oily mixture as foon as he could fwallow, which made him bring up a great deal of bilious matter. But the fits returned often, during which his eyes were open, and fixed; his face was distorted, and his pulse was hardly perceptible from the violent contraction of the muscles and loss of blood. Between the fits the pulse was weak, but increased in quickness and strength on the approach of, and during, the paroxyfm. 2d. He was quiet in the night, though infenfible. P. M. near another pound of blood was taken from him; a blifter was applied between the shoulders, and a cathartic prescribed. 3d. He was quite fensible, and faid he had been fubject to fits.—Was not his attitude in cleaning the coppers, with his head hanging down for a length of time, being short-necked, sufficient to have brought on the paroxysm of epilepsy to which he was fubject?

John Foster, aged about 50, was feized, the 1st of July 1762, with pleuritic symptoms, but did not complain until the 4th of violent pain in his left side, accompanied with sever. V. S. and nitre was added to his drink. 5th. His pulse was strong. Ut heri; and for a change he was allowed the infusion of tamarinds. 6th. He was no better. Bis V. S. et vesic. parti dolenti applicatum erat. 7th. The appearance of the blood was not altered. The pulse strong; skin hot and dry; tongue parch-

ed; the pain continued, and he was delirious for twelve hours yesterday. Vesicatoria talis erant applicata. P. M. V. S. et vesic. capiti applic. 9th. The pulse strong, but less quick. Delirium. Was feized about eleven A. M. with rattling in his throat; a cordial mixture, with a few drops of tinct. theb. was prescribed. He died about two o'clock P. M. The blood taken from him yesterday had an extremely viscid buff on it, a quarter of an inch thick. The ferum was little in quantity.

THE preceding cases show the medical practice in 1761-2, on board the Prince of Orange, which was very unsuccessful in all cases except scurvy; and the success in it was owing to the fresh meat and vegetables, and to the sick being sent on shore. Both the patients in the small-pox who died, lay on the orlop deck secluded from the fresh air, which is particularly requisite in that disease. More will be said on scurvy in the sequel of the work.

SECTION II.

Observations on board the Terpsichore.

In 1763 I was on board the Terpfichore frigate, employed, partly at Lifbon, partly at Newfoundland, and partly on the coast of Ireland, until the

the end of February. The company of this ship were young men, highly disciplined, and so well employed, in a ship kept extremely clean, that very few medical cases occurred.

Mr. A. H. aged about 32, was feized with fever of the tertian type, and recovered by the liberal use of the bark, which I had an opportunity of administering as I liked, the surgeon being then indisposed at Newsoundland\*.

THE following case, though not strictly medical, is so remarkable, I think, as to deserve notice. It is a case of concussion from a blow.

Mr. R. R. aged about 20, in August received a severe blow with a man's fist on the right eye, which instantly occasioned excruciating pain, cold shivering, faintness, and violent retching. The pain, on attempting to open the eye for examination, was insufferable, and remitted very little throughout the night. The stomach, for thirty-six hours, retained nothing, not even anodynes; and for several days after with great difficulty retained any thing. But, notwithstanding the violence of those symptoms, there never appeared the least degree of topical inflammation or ecchymosis. It was a considerable time before the symptoms of concussion went off, and before he recovered his hearing in the right ear, which was very much affected by the

<sup>\*</sup> Here the bark was equally efficacious as at Greenland.

accident. The eye remained flatter, and its fight was much weaker than the fight of the other eye ever after. V. S. Fotus; cataplasmata; vesicatoria; volatilia medicamenta; opiata; et diæta tenuis suerunt præscripta.

#### SECTION III.

## Observations on board the Cornwall.

ABOUT the end of July 1764, I went on board the Cornwall guard-ship at Plymouth, to which ship I belonged near two years. As most of the medical cases, particularly those of sever, were sent on shore to the hospital, the opportunities of making observations were sew and short.

James Parsons, aged about 18, complained, the 13th Nov. 1764, that foon after having received a blow on the right fide he was taken ill, and became quite yellow. When he applied for relief, his countenance, particularly the white of the eyes, was icteric. The pulse was small and hard, his skin dry, his urine very high coloured; he had no appetite, and complained of great lassitude. Bleeding, purging, soap, nitre, with the infusion of lint-seed, were prescribed; and he soon recovered.

WM.

WM. Morgan, aged about 20, of a healthy constitution, complained, the 22d Nov. 1764, that he had been fuddenly feized with hiccough, and fenfation of fomething rolling up his throat, which foon deprived him of his fenses, to use his own words. I found him in a cold clammy fweat, with his face pale, his mouth open, his eyes distorted, and a very fmall pulse. In this speechless and insensible state he continued some time. When he began to recover he appeared to be much frightened, admitting nothing into his mouth, and showing figns of fear when touched. His fpeech was inarticulate and incoherent, like a drunken man's. The paroxyfm terminated with a copious stool. Was this case hypochondriasis? Emet. et cathart. et assæfætidæ gr. vi. mane et vespere; et sp. nitr. d. gut. xxx. expotione bis in die cepit. He foon recovered.

The medical practice of Plymouth Royal Hofpital did not differ from the general practice of the times.

#### SECTION IV.

· Observations on board the Adventure and Ferret.

ABOUT the end of July 1766, I was removed to the Adventure frigate employed on the

Jamaica station. On board of this ship very few cases deserving notice occurred; and but sew on board the Ferret, to which sloop I was lent, in October 1766, to act as surgeon of her. This sloop was at Pensacola. While I was on board the Adventure, the following case of sever happened.

Mr. R. R. aged about 23, complained, in Sepof nausea, of bitter taste in his mouth, and of great thirst; yet the tongue was very little discoloured. The pulse was generally weak and irregular, the skin moderately hot, and he was feeble, anxious, and restless. Emet. cath. et haustus falinos cepit; but was not relieved. He also took seven grains of James's powder three different times. During the influence of each of the doses he felt himself unusually comfortable four or sive minutes. He perceived no effect from a grain of tartar. emetic. He was relieved, however, by an injection and a slight hæmorrhage from the nose; and recovered by the use of the Peruvian bark and nourishing diet.

Mr. Lawson, purfer on board the Ferret, aged about 29, was feized, 26th October, fuddenly with acute pain in his left arm; difficulty of breathing from violent oppression at the præcordia; and retching, succeeded by chilliness. It apparently gave him pain to speak; he was in great perturbation, and his pulse was languid. Knowing him to be a stout healthy man, V. S. et sp. nitr. d. gut. xxx.

ex theæ infuso tepido statim, et pro re nata sumendas, præscripsi. After this, the paroxysm still increased; he became more restless, the pain gradually ascending to the throat and head, assecting the whole side; which was succeeded by delirium; from these symptoms, prosound sleep, and free perspiration supervening, relieved him persectly, and he recovered in a day or two.

The paroxyfm returned feveral times, always preceded by pain in the arm; but from the immediate use of the pediluvium, and taking a sudorific draught, it was never afterwards so violent as at first\*.

Oct. 22d, being out cruifing off the Mobille, a violent gale of wind came on, which obliged us to cut away all our masts except the foremast. The wet and fatigue which the men suffered on the occasion, after having lived a long time on salt meat, without any vegetables or fruit, brought on the scurvy immediately amongst them; of which a number were landed very ill, who were sent to the governor's plantation soon after we returned into port, and that was almost immediately after the gale ceased. The governor allowed them what vegetables his garden afforded, and the captain gave the worst patients his own wine. One of these died, as I was afterwards informed.

<sup>\*</sup> He attributed this unusual complaint to a sudden check being given to profuse perspiration. Of what class and genus is this paroxysm, or disease?

At this time (after returning to Penfacola) the acting lieutenant of the Ferret complained to me of a tertian fever, under which he had laboured a long time; who was foon perfectly cured by the liberal use of the bark, which he had been taking ineffectually before that, sparingly.

Mr. Watson, furgeon of the Ferret\*, aged about 26, of a thin habit of body, formerly much afflicted with afthma, and lately haraffed with an irregular tertian, from catching cold, was feized the 14th of November with dry belly-ach, urgent thirft, and a fmall quick pulse. Enemate, anodyno et pediluvio utitur.

16th and 17th, was not relieved; nor had a ftool. Calomel. gr. iv. cum opii, gr. i. in pilul. forma, et enemate ut vifum utebatur. 18th. He continued in extreme pain without having had a ftool. Singultus, at times, which increased on bleeding him. The injection was repeated. 19th. He continued the same way; injections of the decoction of the palma christi (seed) were repeated; and he also took the ol. ricin. with manna in small quantities repeatedly, by which means he had a small stool. 20th. He had a copious stool A. M.; but the pain in his bowels with retching and singultus continued. P. M. profuse bloody stools came on, without abatement of the other symptoms. He took three grains of rhubarb, pulv. ipecac. gr. ij.

<sup>\*</sup> He directed his own treatment.

op. gr. fs. every two hours, and the decoct. alb. at pleafure.

21st. He rested pretty well until one A. M. when the purging, retching, and singultus returned more violently with a cold clammy sweat over him; the tongue was black; ptyalism supervened, no doubt from the calomel he took the 17th; and the pulse was small, frequent, and irregular.

22d. His extremities were cold; he was delirious; the pulse was quite languid, and what he vomited was black. The faline draughts, in a state of effervescence, were administered with opiates; and the scrobiculus cordis embrocated with laud. liquet lin. sapon. He likewise took a decostion of sheep's suet boiled in milk. 23d he died, the 8th day of his illness.

Soon after this I returned to the Adventure.

WM. EDWARDS, aged about 40, complained, the evening of the 17th of April 1768, on board the Adventure, of violent retching and purging, with fevere pain of his bowels. The pulse was quick and small, and he had a cold sweat over him, with considerable thirst. Emet. etiamque pulv. ipecac. gr. v. bis, et anod. h. s. cepit.

19th. The vomiting, purging, and pain were abated. He faid, he fwallowed fome fish bones before he was taken ill.

20th. Had no ftool yesterday or to-day; but complained of great pain and tension about the

umbilical region; he was anxious and reftlefs, and the pulse was quick and small. His thirst was moderate, and the tongue almost of its natural appearance. Solut. fal. cath. amar. coch. ij. omni hora, denec alvus fuerit soluta, et anodyn. h. s. cepit; P. M. V. S. The pain now was confined to the left hypochondrium. As the blood slowed down the arm, it appeared of differently coloured streams; black; a white, or lighter colour; and a florid red which was thinnest, and the black the thickest.

He continued getting worse until sour P. M. of the 23d, when the pain ceased entirely; the tension and tumefaction subsided, and he became quite easy \*. On the morning of the 27th, tremors, subfultus tendinum and convulsive twitches seized him before he died. Medicinis variis usus est, ut visum.

#### SECTION V.

Observations on board the Preston and Diligence.

ABOUT the middle of July 1768, I was removed to the Preston, the admiral's ship at Jamaica, where I continued about four months; at the expi-

ration

<sup>\*</sup> Mortification took place no doubt.

ration of which I was appointed furgeon of the Diligence floop.

During that time, the crew of the barge, employed to attend the admiral at his penn, were infected with marsh effluvia at Greenwich, where the boat always lay to wait for him. Greenwich is a most unhealthy situation; so unhealthy, that it was found requisite to quit it after government had been at a very great expense in building there a naval hospital. A fine situation was then selected for building one at Port Royal.

The first of those men that was taken ill unfortunately fell to my care, and was walking about the day before he died. This event, being very unexpected, made a deep impression on my mind. I truly thought him in no danger, so little was I then acquainted with the rapid progress of fever arising from marsh essuain in a hot climate. But two\* more of them died under the surgeon's own care, in the same unexpected manner, notwithstanding he had been on the Jamaica station before, and had attended fever patients frequently, who had been infected at Greenwich. Besides, I told him the method in which I had treated the poor man who died under my care. I did not give him any bark †, because, according to the universal mode of treating fe-

<sup>\*</sup> This I was told. For the fever made its appearance about the time of my leaving the Preston.

<sup>†</sup> I was not then confirmed in my opinion, that I ought to have treated fever at Jamaica as I afterwards did there, successfully, on board the Rainbow; and on the coast of Africa.

ver in those days, sufficient evacuations had not been made; no violent exacerbation, or intermission, had happened. Besides, it was according to the same prevailing idea too early in the fever; and the patient, who had been only ailing a few days, did not appear to be in any danger. The method of treatment therefore confifted of an emetic, an aperient, faline mixture, and fmall doses of antimonials.

On the 17th Nov. 1768, I was appointed furgeon of the Diligence floop, which was ordered for England, and failed in February 1769; but we did not get home before the beginning of April; foon after which the floop was paid off.

The men belonging to the floop, before we failed, and all the paffage home, notwithstanding it was a very bad one, blowing fo hard that provisions could not be dreffed for them for nine fucceeding days\*, were healthy.

The medical practice in the Naval Hospital at Port-Royal, which I had an opportunity to fee, did not differ materially from the general practice of this country†.

\* We were nearly cast away upon Scilly.

† Although the preceding cases fell under the observation of the author, in the early part of his life, yet, as many of them were managed'(by much older practitioners than himself) according to the practice of the times, it was thought proper to relate them as the first link of the chain of the work, that the reader might see what progress has since been made in medical practice. The learned and experienced reader will therefore, it is hoped, without severe criticism, view the author's design with liberality.

# PART II.

METEOROLOGICAL AND PHYSICAL OBSERVATIONS ON BOARD HIS MAJESTY'S SLOOP WEASEL, THE COMPLEMENT BEING 90 MEN, &c. EMPLOYED ON THE COAST OF AFRICA.

# CHAPTER I.

Meteorological Observations, from the 13th June until the 8th September 1769.

N. B. The Reader, in the statement of the Sick List, may supply either patients or cases, as he chooses; and he may also read strained for strain, and contused for contusion, as he pleases.

	Time.	Latitude d. p. or r.	Longi- tude in, m. or o.	Winds.	Rain or Dew.	Atmo- sphere.
]	nii13 Die Iartis			f NNW t WSW *	•	a. m. c.
	14	49° 20″ r.	From the Lizard 00° 43″W	f SWbS t NNW **		a.m.cl. p. m. c.
-	15	47° 37″ r.	02° 08″W	f NWbN t W *	•	a. m. c. p. m.cl.
	16	45° 19″	03° 41″W	f W t NW **		cl.
	17	43° 45″ r.	04° 20″ W	f NWbN t WbN*		cl.
	18	41° 30″	fr. Green- wich.	f NWbW tNE**		cl.
	19	39° 45″	12° 02″W	NE*		cl.
	20	37° 50″	12° 48″W	f NE t NNE **		a. m. c. p.m. cl.
	21	35° 47″	13°34″W	f NNE t N		c.
	22	34° 08″	fr. Green- wich 14° 14″W	NNE N		m. cl.
	23	33° 03″	15° 27″W	NNE N*		c.
	24	31° 49″ Madeira.		f NbE t NE *		a. m. c. p.m. cl.
	25	29° 50″		NbE N*		cl.
1	7		1	. 3		1

- STATE of the SICK LIST, with Remarks from 13th June until 8th September, 1769.
- Sailed a. m. from Plymouth Sound with three in the list; one fever, one intermittent, and one cold.
- 14. One fever from cold added to the list; four ill.
- 15. One contusion added to the list; five ill.
- 16. The cold of the 13th is well; four ill.
- 17. One wound added to the list; five ill.
- 18. One head-ach added to the list; six ill.
- 19. Yesterday's head-ach is well; five ill.
- 20. The fever of the 14th, and the contusion of the 15th, are well; three ill.
- 21. No alteration in this day's list.
- 22. Three ill.
- 23. No alteration in the list.
- 24. The intermittent of the 13th is well; two ill.
- 25. One sore throat, and one with eruptions, added to the list; four ill.

Time.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Winds.	Rain or Dew.	Atmo- sphere.
Junii 26	28° 30″ St. Cruze Teneriff.		V*		cl.
27			V*		c.
28			f NE t NW*		c.
29			V**		m. cl.
30			f NW t NE *		c.
Julii 1 Die Saturni			V & -		с.
2			NENNW *		cl.
3					c.
4			V *		c.
5			NE SE*		c.
6			V *		c.
7		\$	V *		h. & cl.
8			V *		a. m. cl. p. m. c.
9		State-Street, pro-repositions	V		a. m. c p. m. cl.
10			V *		c.
11			f ESE t NE *		m. cl.

- 26. The intermittent, returned well the 24th, relapsed; five ill.
- 27. No alteration of the list.
- 28. One sore throat added to the list; six ill. The weather very warm.
- 29. The one added the 25th, with eruptions, is well; five in the list.
- 30. One strain admitted: six ill; one bad fever, one intermittent, one wound, two sore throats, and one strain.
  - The sore throat of the 28th ult. is well, and the other sore throat is venereal; four patients.
  - The wound of the 17th, and the strain of the 30th ult. are well.
  - 3. One strain, and one contusion, admitted; four ill.
  - 4. Yesterday's contusion is well, and one tumor complained.
  - 5. One feverish patient admitted; five ill.
  - 6. No alteration in the list.
  - 7. The strain of the 3d, the tumor of the 4th, and the fever of the 5th, are recovered; two ill.
  - The fever patient of the 13th ult. died, and one contusion admitted; two ill.
  - 9. No alteration in the list, p. m. very sultry.
- 10. The list the same.
- No alteration in the list. Sailed to-day, and turning to windward.

Time.	Latitude,	Longi- tude in, m. or o.	Vinds.	n or	Atmo- sphere.
Tir	Latin d. p.	Log fud m.	W	Rai	spl
Julii 12	2s° 36″		f NNE t ENE **		cl.
13	Porto Orotavia, Teneriff.		V *		a. m. c. p.m. cl.
14			V *		cl.
15			V *		cl.
16			NE*		cl.
17	27° 49″		f NNE t EbS *		p. m. c
18	25° 01″		f EbN t EbS ***		a. m. c. p.m. cl.
19	21° 49″		ENE E		m.cl.
20	19° 08″	16° 57″	ENE WbN ***		с.
21	17° 31″	fr. Green- wich. 16° 18″	V ***		c.
22	16° 13″ Barbary Coast.		V*		c.
23,	15° 54″		NbE and NbW *		с.
24			NbE and NbW **		c.
				1	1

- 12. Two patients.
- 13. One case of nausea admitted; three patients. Seven p.m; anchored in the road, which is quite open.
- 14. The contusion of the 8th, and yesterday's complaint, recovered; and one with nausea admitted: two sick.
- 15. One case of head-ach complained; three ill.
- 16. One contusion admitted; four ill.
- 17. One of nausea complained; five siek. Sailed from Teneriff.
- 18. Yesterday's complaint a fever, and one nausea admitted; six ill.
- 19. Yesterday's nausea is well; five sick.
- 20. The contusion of the 16th is well, and one with lumbago admitted; five ill.
- 21. The head-ach of the 15th, and yesterday's lumbago, recovered.
- 22. The nausea of the 14th recovered; and one strain admitted; three ill.
- 23. The pausea of the 17th recovered; two ill. Anchored p. m. and sent a boat up to the fort of Scnegal.
- 24. Two sick. Lying in the road off the river Senegal.

Rain or Dew.	Winds.	Atmo- sphere.
	V *	a. m. c. p. m. h. & cl.
	V*	p. m. cl.
	WNW*	h. & cl.
	NNW *	h. & cl.
	NNW *	h. & cl.
*	V **	a. m. h. & cl.
*	V *	a. m. & p. m. cl. & h.
X	V *	cl. & h.
7 34	— and V	cl. & h.
	V *	

- 25. No alteration in the list. P. m. we sailed.
- 26. Two patients.
- 27. No alteration in the list.
- 28. One contusion and one tumor admitted; four ill.
- 29. No alteration in the list. Spoke h. m. sloop Hound, and got a man out of her to pilot us up the river; he had a very sickly complexion. P. m. standing in towards the river Gambia.
- 30. The Hound's man complained of fever; five patients. A.m. getting up the river; and anchored p.m.
- 31. Some men sent ashore to cut wood. The river is very shallow, and the land on each side of it is covered with thick woods and mangroves, and is very low; with a thick haze constantly over it, and the river. Our men have been exposed to the rains. Two with intermittents; the Hound's man is one: one strain, one contusion, and one tumor, in the sick list.
  - 1. The contusion of the 28th is well. Four patients. Sailed up the river and run aground near Fort James; which occasioned the men's being very much fatigued in the heat of the sun. A very sultry day.
  - 2. Two feverish complaints admitted. Six ill. Got the ship off and anchored, after much trouble and labour to the men in the sun. The fort, and we were nearly opposite to it, is on a small island seven leagues up the river; which is about six nules broad there, and shallow. On the Barra side, where the watering place is, it is very swampy, and covered with trees and shrubs. The water was thickish with mud, but had no bad taste. The men were obliged to swim the casks off, as a boat could not get near the shore. A continual haze notwithstanding the sun shines.

Time.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Winds.	Rain or Dew.	Atmo- sphere.
Aug.			— and V	N.	cl. & h.
4			V 🔅		cl. t. &l.
5			sw -	****	cl.
			Wly —	38	cl.
7			V 🌣		cl. t. &l.
8			V and —		cl. t. &l.
9	13° 40″		V *		cl.
10	13° 41″	15° 49″ from Green- wich W.	V		cl.t.&l.
11	13° 55″ r	16° 30″W	V *	**************************************	cl. & h.
12	14° 06″ r	17° 00″W	V *		cl. & h.
13	12° 54″	17° 04″W	V **		cl. & h.
14	11° 30″	17° 34″W	f NWbW t NNE **	1984	cl. & h.

- 3. One of yesterday's fever patients is an intermittent. Six patients.
- 4. No alteration of the list. The two last added intermittents are very ill. The men are employed in watering the ship.
- 5. No alteration of the list. Disagreeable weather.
- 6. The tumor of the 28th ult. recovered. Five sick.
- 7. One of the feverish cases of the 2d is well. Most of the officers and gentlemen have been ashore—which from the rains was all a marsh—a shooting. Four sick.
- 8. Five with feverish, two with purging complaints, and one with eruptions, admitted; twelve ill. Sailing down the river, and rains anchoring now and then.
- One with purging complained; thirteen ill. Sailing down the river.
- No alteration in the list. Got out of the river. Very disagreeable weather.
- 11. One of the fluxes of the 8th, and one of the fevers, with the purging of the 9th, recovered. Four with slight fevers admitted; fourteen sick.
- 12. One of the bad intermittents of the 2d is well; p. m. one with slight fever complained; fourteen patients. The fevers appear slight, though of the remitting type.
- 13. Two. of the fevers of the 11th recovered, and one purging complaint admitted; thirteen sick. Sultry disagreeable weather.
- 14. The old intermittent; the Hound's man; one of the slight fevers of the 8th; and the one with eruptions, recovered. Six with fever added to the list; thirteen patients.

1	Tıme.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Winds.	Rain or Dew.	Atmo- sphere.
	Aug.	10° 47″ r	17° 45″W	5bW **	*	cl. & h.
	16	10° 18″ r	17° 20″W	SW **	. 36	cl. & h.
	17	09° 33″	16° 46″W	SW **		cl. & h.
	18	OS° 38″ r	15° 55″W	V *	76.02	cl.
	19	08° 05″	14° 31″W	SW *	×	cl.
	20	07° 26″	12° 04″W	SW*		c.
	21	06° 30″	10° 37″W	SW*		cl. & h.
	22	Off Cape Monsera- do.		SW *	767	cl.
	23	05° 33″ r	09° 38″W	SW*		cl.
	24	05° 13″	09° 29″W	SW *		c.

- One with fever admitted; sixteen ill. Very disagreeable weather.
- 16. Two fever patients of the 8th; one of the 11th; one of the 12th; and the purging case of the 13th, recovered; four with fevers admitted. Those added the 14th and since are bad intermittents. Fifteen patients.
- 17. One of yesterday's admitted fevers recovered; two with fevers, one with diarrhœa, and one head-ach case, complained; eighteen sick.
- 18. One of the fevers admitted the 8th; one of the 11th; and yesterday's head-ach patient, recovered; seven with fevers admitted; and one on the list before is become fevertwenty-two in the list; most of them bad remittents.
- 19. The diarrhœa patient, and one of the fevers of the 17th, recovered. Two with fevers; one case of diarrhœa; and the fever of the 8th, recovered yesterday, relapsed. Twenty-four sick. A few of the fever cases have purging.
- 20. The slight fever of the 11th, returned well 16th, relapsed Two with fevers, and two with diarrhoa, admitted; twentynine sick. Most of them fever cases; and very bad symptoms amongst them.
- 21. P. m. one of the fever cases admitted the 14th died. Very bad symptoms prevail amongst the fever patients. Twenty-eight in the list. Rather cold to-day.
- Three with fevers; and one with hypochondriasis admitted; thirty-two ill.
- 23. No alteration of the list. Very bad symptoms still prevail amongst the fevers.
- 24. One of the fever cases admitted the 16th—a boy—died; and the case of hypochondriasis recovered. Four with fever admitted; thirty-four ill. One seized with fever by contagion, from feeling the boy's pulse when he expired.

Time.	Latitude, d. p. or r.	Longi- rude in, m. or o.	Winds.	Rain or Dew.	Atmo-sphere.
Sept.	04° 07″	os° 36″W	SW *		cl.
26	04° 11″	07° 08″W	SW **		cl.
27	04° 34″	06° 20″W	SW *	200	h.
28	05° 06″	06° 08″W from Lon- don.	SWbW*	100	h.
29	05° 08″	05° 37″W	V *		h.
30	04° 57″	04° 51″W	V *		h.
31	04° 41″	04° 06″W	V *	34	h.
Die Veneris Sept. 1.	04° 55″	03° 14″W	V *	- 364	lı.
2	05° 17″	03° 08″W	wsw_		a. m. c. p. m. h.
3	05° 22″		V & —		a. m. c. p. m. h.
4	Winne- bah road		V *		c.
5			sw		cl.

- 25. One with fever complained; thirty-five ill, and mostly with very bad eases of fever.
- 26. One of the fever patients of the 17th died. There are very few of the ship's company who are not ailing more or less; though thirty-four only are in the list.
- 27. Two fever patients, one added the 18th, and the other the 20th, died; thirty-two in the list. The ship is frequently washed with vinegar, and was smoked to-day. Very dangerous symptoms amongst the sick.
- 28. Two fever cases, one added the 18th, and the other the 20th, died; their deaths happen unexpectedly: thirty in the list.
- 29. One fever patient of the 14th, one of the 16th, and two of the 24th, recovered; twenty-six ill.
- 30. One fever patient, admitted the 18th, died. Twenty-five sick.
- 31. One fever ease, admitted the 24th, dicd; and one fever patient complained.
  - One fever patient, received the 18th, died; two fevers of the 20th, two of the 24th, one of the 22d, and one of the 28th ult. recovered.
     One fever case, complained of relapse; nineteen in it. Mostly fevers, and very bad symptoms prevail yet.
  - The yesterday's relapse ease recovered, and two with fevers admitted; one is a relapse: twenty ill. Anchored several times to-day.
  - One of yesterday's admitted fevers is well; nineteen in the list. Turning up to Winnebah. Anchored several times to-day again.
  - 4. No alteration in the list. Anchored off Winnebah.
  - 5. Nineteen in the list. The worst of the fever patients are getting better. The rains have been over here some time, and the people ashore are healthy.

Time.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Winds.	Rain or Dew.	Atmo- sphere.	
Sept.			SW &		h.	
7			V *		cl. & h.	
8			V *		cl. & h.	

- 6. Two fever cases of the 19th, and the case of diarrhea, recovered; sixteen patients.
- 7. Sixteen in the list. Watering the ship here.
- §. A case of diarrhoa admitted ; seventeen sick. No more fever patients complained.

## CHAPTER II.

Remarks on the preceding Observations.

### SECTION L.

A Review of the Sick List, from the 13th June until the Commencement of the Fever.

THE patients admitted from the 13th of June to the end of the month were, one with bad fever; one intermittent, who got well and relapfed; two with feverish complaints; two with fore throats, one of them venereal; one with eruptions; one wound; one contusion; and one strain.

None of these cases required any particular treatment, except the one with bad fever, which shall be described in the next month.

The ship's company continued very healthy all the month of July; few complaints having happened, and none of them was dangerous but the Hound's man, who was added towards the end of the month. The cases were one bad intermittent; three flight fevers; two with naufea; one with head-ach; one lumbago; four contufions; two strains; and two with abscefs.

The flight fevers; cases of nausea; and headach, were removed by gentle evacuations, faline draughts

draughts with antimonials, elix. vitriol, and proper regimen \*. The other complaints, except the Hound's man, required no particular method of treatment; but the bad fever of last month died the 8th of July, an account of which I am now to insert.

John Lee, marine, aged about 30 years, was taking bark for an intermittent, of which he was recovering, when he was feized the 13th of June, after getting cold, with general tremors, convulfions, lofs of fpeech, and cold extremities. pulse was quite languid and irregular. Volatiles were used, and large blifters applied to his back and ankles. Second day, the convulfions were abated, but the tremors continued; and he was costive. A clyster was administered, and a large fpoonful of a cordial julep prescribed every hour. Sd, His pulse was firmer, and he spake sensibly; but his tongue was very foul. The blifters were renewed; his medicines continued; and he was allowed wine. 4th, His tongue was brownish. Fifteen grains of bark were added to every dofe of the julep. 5th, 6th, and 7th, His tongue was much cleaner, but the coma continued. His medicines and wine were repeated, and the blifters renewed. 8th and 9th, He was much better, and continued the bark and julep every two hours with

<sup>\*</sup> The diet allowed the Sick is mentioned, Part II. ch. i. sect. 5.

his wine. 10th, From drinking beer the preceding afternoon an accession of fever came on; attended with quick fmall pulse, dry hot skin, parched tongue, and flushed countenance. The right side was in some measure paralytic, and he had convulfive twitches at times. The medicines, wine, and blifters, were repeated. 11th, The fever and convulsions remitted; but the coma continued. I repeated his medicines and wine. 12th, He was cool, but extremely weak. 13th, He was hot, and no way better. 14th, 15th, 16th, 17th, and 18th, He was confiderably better, and continued his medicines with wine. 19th, p. m. He became much worfe, but still took his medicines. 20th and 21st, He became weaker; the tremors returned; his tongue was black; his pulfe was quick, and very fmall. On the 22d, the tremors were conftant, and his pulse was very irregular. Musk, julep, and his wine, were prescribed, and fresh blisters applied. 23d, 24th, and 25th, Deglutition became difficult, and his pulse vermicular, with subfultus tendinum, and continual tremors. His medicines and blifters were continued, until he died at midnight of the 25th.

From the 1st of August to the 14th, one with bad intermittent, eleven with slight fevers, four with diarrhea, and one with eruptions, complained.

The flight fevers were of the remitting kind, but very mild; and were all carried off by gentle emetics, emetics, purges, faline draughts with antimonials, elixir of vitriol, and proper diet. One of them, who had acute pain in his fide, had a little blood taken away; and he recovered very well. Some of these were again seized with sever, and died.

The cases of diarrhoea were likewise cured by moderate evacuations and diet.

### SECTION II.

Two Cases of Intermittents, and some Remarks.

I THINK it proper to relate here the two bad intermittent cases; which I term so, because there was a cessation of the sever and symptoms between the paroxysims.

David Clency, feaman, aged about 38 years, pretty flout, of a very fickly complexion, complained the 31st of July, the day after he came from the Hound, that he was feized with chilliness, which was fucceeded by violent head-ach, fickness at stomach, with retching, and severe pains in all his bones, particularly in his loins, with great thirst. His pulse was quick, but not strong; his skin very hot and dry, and his tongue was dry and white. I prescribed the tartar emetic in small quantities every half hour until it puked him; and in two

hours

hours afterwards I ordered him a faline draught with thirty drops of the effen. antimon. and acidulated fage tea for his drink. 2d, The paroxyfm ended in profuse perspiration towards morning; after which he continued perfectly cool and eafy until 6 p. m. the time of the fit's commencing, when another less violent paroxysm than the former returned, and continued a fhort time. A dose of the fal. cath. amar. was prescribed, and the faline draught as before, during the fit, with drink acidulated with lime-juice. 3d, He had a short paroxysm in the night; was free of fever, a.m.; but complained of weakness in his loins; and want of appetite. At 7 p.m. a paroxylin commenced with rigors, which lasted an hour, and ended in perspiration as usual. During the fit, he complained of great pain and stricture over his eyes. The medicine prescribed the preceding night was repeated every three hours; with tinct. theb. for his head-ach, which it relieved. 4th, He was very cool and easy; but at the usual time p.m. a mild paroxyfm commenced, which did not continue long. His medicines and drink were repeated. 5th, He complained of weakness and a little headach; but never had another paroxysm. Half a drachm of the bark was prescribed first every two hours; and afterwards a drachm every two hours until he recovered on the 15th of his illness.

SERJEANT

SERJEANT GILLESPY, aged about 27, who had had a flight fever the proceeding month, was feized the 1st of August with chilliness and rigors, which were fucceeded by the fame complaints as occurred in Clency's cafe, only more violent, with acute pain in his right fide; which were fucceeded by a perfect intermission. He complained the 2d, when both the emetic and purge were prescribed; and the faline mixture with eff. antimon. at night. At 7 p. m. the paroxyfm returned. 3d, The paroxyfm went off in the night, and he was quite cool and eafy a.m. I ordered him half a drachm of the bark every two hours during the intermission. 4th, He had a very fhort, and mild paroxysm in the night. His bark was repeated every hour. He had no return of his fever; but continued his bark until the 12th; when he returned to duty.

Such was the state of the sick list from the time the Weasel sailed until the 14th of August, when the fatal remittent made its appearance. A boy of 13 years of age was the first seized with it on the 12th, but unfortunately did not complain before the 14th. The symptoms at first seemed to differ very little from those of the preceding cases; but I was much alarmed, when I found that, instead of perfect intermissions, neither the sever nor other symptoms intermitted; that in the remission they had continual pain in their loins, which was greatly increased during the paroxysin; that they had a burning

burning heat in the palms of their hands and foles of their feet, with great thirst; and that they were exceedingly dejected during the imperfect remission. I was the more uneasy, because the sick list was hourly increasing with similar cases; and I called it a remitting sever, because there never was an entire cessation of the symptoms, from its commencement until its termination.

The following observations were copied from the minutes which I frequently made in the day, when visiting the fick, and immediately after reduced, nearly, into the same order as they now appear in Dr. Lind's book \* on hot climates: on reviewing my minutes, I have nothing of consequence to add to that account of the sever.

Some patients had the fever in a mild, and others in a malignant form, comparatively fpeaking. I shall therefore first relate the symptoms which appeared amongst them who had it in the mildest form; secondly, the symptoms which occurred amongst those who had it in its malignant form; thirdly, make some remarks upon the symptoms and the days which proved critical; fourthly, insert the manner of treatment; sistsly, add a few cases; and lastly, conclude with some remarks concerning the cause of the sever having prevailed on board.

VOL. I. F CHAPTER

<sup>\*</sup> See the Note, p. 58 of the second edit. printed in 1771.

## CHAPTER III.

Of the Remitting Fever.

#### SECTION I.

The Fever described in its mildest Form.

Ift day, The patients complained of head-ach, fickness at their stomachs, thirst, great uneasiness, with severe pains, especially in their backs and loins. Their pulses were small and quick; and though some of their skins were hotter and drier than in health, most of them were chilly and hot alternately.

Their complaints were easier in the morning; but towards night there was an exacerbation, which was observed throughout the fever.

2d, They were more lively, their complaints being relieved; but their pulses were foft and weaker than in a natural state; and they had no appetite.

3d, The fymptoms became more violent, with giddiness; infatiable thirst; foul tongues, which trembled when they put them out; they had no fensation of taste; and their speech was weak and faultering. At night they had a moisture on their skins.

4th, They

4th, They were much weaker; and towards night they were very hot and reftlefs. Numbers fweated profufely, but were not refreshed.

5th, A few had been delirious in the night, and were much diffurbed in their fleep with frightful dreams and notions. Their weakness increased. Hitherto they were not confined to bed in the day-time.

6th, They were more reftless from anxiety and delirium. Their tongues were brownish, dry, and chapped.

7th, Towards night, they complained much more. The delirium, watching, univerfal uncafinefs, and thirst, being all increased.

8th, They paffed the night ill, from uneafiness and watching, and complained much more of their backs, loins, and giddiness. P. m. their pulses were very irregular, and generally weaker than in health, the three preceding days; and their tongues were become blackish and chapped.

9th, The remission was more distinct in the day than hitherto; but an exacerbation of the fever and symptoms still returned at night.

After this day there was a perfect remission of the fever in the day-time, though they became feverish towards night until the 17th; and in one case the sever continued to return until the 21st.

The crifis of the fever was a gentle purging, with an equable and moderate perfpiration.

#### SECTION II.

Description of the Fever in its malignant Form.

1st day, Besides those symptoms which they had in common with the other patients, in a more violent degree, they were seized with some of the following: despondency, great lassitude, prostration of strength and spirits, anxiety, giddiness, violent retchings, severe gripings and purgings, costiveness, cough, violent pain and stricture over the eyes, pain in the side, quick hard pulse, and the tongue dry and white.

2d, They who had been both vomited and purged, feemed to be rather better, but had no appetite.

3d, Some had a flight remission until the evening approached; their countenances in the mean time were much flushed.

4th, Great inquietude, anxiety, frightful dreams, and idle notions, prevented them from fleep. When a remiffion happened, it did not last above three hours. They seemed then a little cooler, but their thirst was not abated; there was burning heat in the palms of their hands, and soles of their feet, and their memories began to fail. The tongues of some were white and foul, though in general they were dry and chapped, and they complained of

bad

bad taste in their mouths. They who were costive at the beginning of their illness, continued so; but several were seized with bilious vomitings and purgings \*.

5th, Several were delirious in the night, and others exceedingly restless and desirous to get out of bed. Some of their tongues were black, and their teeth covered with sordes; and the cough was much more urgent.

6th, A few had flight remissions, a.m. though they all passed a very restless night. The pains of their backs and loins, their giddiness, with severe pain at the bottoms of the orbits, were exceedingly troublesome. The costiveness was more obstinate, and all the other complaints increased in violence.

7th, The delirium was more general. Some of their countenances were quite yellow, and others looked wild. A fealding of the urine (not from blifters), rough, brown tongues, a finacking of the lips, were frequent for fome days before, and the vomiting and loofe fetid stools were more general. Their pulses were irregular.

8th, A few, after violent vomitings and purgings, which stained like an infusion of fasfron, broke out in purple blotches, resembling the stinging of nettles, particularly about the face and neck, which soon disappeared again: while they remained out on the skin, they thought themselves better. In

<sup>\*</sup> Cleghorn styled these cholera morbus.

one patient the parotid gland began to suppurate. The tongues of some were black, and their teeth crusted over with black fordes; but of others, they were brownish, dry, and much chapped. The delirium, stupor, convulsive tremors, and catchings, twitchings of the tendons, hiccup, deep sighs, pain and oppression about the præcordia, swelling of the hypochondria, cold sweats, an involuntary discharge of the urine and sæces, and a muttering or murmuring inarticulately, were frequent. Their pulses were quite irregular.

had the purple blotches, likewife had an hæmorrhage from the note and mouth at times, which tinged his linen yellow, as did his urine, which was bloody.

10th, A few had very flight remissions.

11th, The dangerous fymptoms prevailed, with cold clammy fweats, and extreme weakness. In one patient, a large ecchymosis-like swelling appeared upon the right side of the neck and face, a little before his death, which, immediately after he died, became black.

12th, There were no favourable appearances. They continued to lie on their backs as they had done for fome days.

13th, Their countenances became more generally yellow; and a purging, without gripes, came on. These patients were much relieved, never being afterwards so hot and restless towards night;

and

and one had an equable and gentle perspiration broke out over him. An eruption appeared about some of their mouths. But the dangerous symptoms continued in other cases, with frequent faintings in one patient.

14th, Gripes when at ftool now attended their purging; and though they were very weak, their fever and other complaints were much lefs. The dangerous fymptoms prevailed ftill amongft fome, with fubfultus tendinum; dozing with the eyes half, and the mouth wide open, and a cadaverous fmell about them. Their fkins were very difagreeable to touch, and, from feeling the pulfe, an uneafy fenfation was impressed on the fingers, which continued for some time after.

15th, The bad fymptoms continued, the parotis was opened, and the fluxed patients with the yellow countenances were better; one of whom had the piles.

\* 16th, Though extremely weak, they were all better except one man, who had a ghoftly countenance, and all the dangerous fymptoms.

17th, The bad case was not better, but all the rest were.

18th, The dangerous case fell into a sound sleep, and an equable perspiration broke out over him, which fortunately proved a favourable criss, and the rest continued to recover.

### SECTION III.

Remarks on the Symptoms of the Fever in both its Forms.

\* They who were costive, when they first complained, and continued fo, all died. The bilious vomitings and flools, which flained like an infufion of faffron, were mortal. A hæmorrhage at the nose and mouth, and bloody urine, all of which tinged yellow, were mortal. The purple blotches which rose above the skin like the stinging of nettles were mortal. An intense coma was mortal. An ecchymofis-like fwelling upon the face and neck immediately preceded death. One, who was taken ill at first with pain in the side, died. A brown rough tongue and mouth, with fmacking of the lips, as if tailing fomething, was mortal. A wildness of the countenance was mortal; one perfon who had this fymptom was very costive too, and never feemed to be in imminent danger, nor was ever confined to his bed, though he died on the eighth day. A despondency, and dread of dying, were mortal. A general coldness with clammy fweats, and muttering or murmuring inarticulately, immediately preceded death. A fyncope or deliquium was mortal.

A cough

<sup>\*</sup> With respect to the following symptoms, it is to be understood that several of them, perhaps, often occurred in one patient.

A cough proved fatal in two cases out of three; and the third was the remarkable case which was dangerous until the eighteenth day. An involuntary discharge of urine and fæces was mortal, except in two cases, one of which was the parotis, that proved very tedious; and the other was the fortunate crisis on the eighteenth day: that patient had taken a good deal of bark in the course of his fever.

A stricture, and pain either over the eyes or at the bottoms of the orbits, were dangerous. Drinking greedily, and in large draughts, were dangerous symptoms. A hiccup was frequently an attendant of the mortal symptoms, and always dangerous. A dozing with the eyes half, and the mouth wide open, were very dangerous. A deep sighing was very dangerous. And in like manner were the pain and oppression about the præcordia, and swelling of the hypochondria. Eruptions about the mouth were not favourable.

Upon feeling the pulse throughout the whole fever, a disagreeable sensation remained for some time after on the singers, especially if the skin was moist, unless the perspiration was critical, and then no such sensation was perceived.

RESPECTING the days which were most critical in both forms of the fever, I must observe, that a perfect remission was obtained in one case upon

the

the 3d. A distinct remission of thirty hours was obtained on the morning of the 5th, in another case; but in this the sever again returned with more violence, and continued twelve hours.

FOUR men died on the 8th, one of whom was dumb, and the parotis began to suppurate.

On the 9th, the critical purging began amongst them who had the fever in its mildest form.

On the 10th, one died; and three on the 11th. The yellow fuffusion and purging, which proved a favourable crifis to many, appeared on the 13th; and in one case an equable perspiration broke out, which was succeeded the next day by a gentle diarrhea, that proved salutary.

One died on the 14th, and the parotis in another patient was ready for opening on the 15th.

On the 16th day one died, and another was feized with the piles.

An unexpected crifis happened from a found fleep, and a free perfpiration, on the 18th.

On the 21st day, there was a favourable crisis of the tedious though mild fever by perspiration.

Most of the ten men who died had never been in a hot climate before. Two were engineers, and two were draughtsmen.

Such were the melancholy attendants of that dreadful fever. Indeed, from my not having a fufficient quantity of bark, this fever had, in a manner, its natural fcope. Yet we find, in Dr. Cleg-

horn's

horn's very accurate account of the fever in Minorca, a few other malignant fymptoms \*.

Apoplexy, though only confidered a fymptom by him, is univerfally confidered one of the most violent and fatal diseases to which the human frame is naturally subject.

Cholera morbus—though the vomitings and purgings in the fever on board of the Weafel were violent at times, they did not amount to my idea of cholera morbus.

Cardialgia—the pain and oppression about the præcordia, or in the stomach, in the Weasel's fever, did not occasion a swooning away †.

Vomiting of matter, like the grounds of coffee, I did not observe.

A palpitation of the heart was not complained of by any of my patients.

A pullation of the abdominal vifcera I never observed.

The abfcefs in the hip never occurred to me in the Weafel.

In these few circumstances only did the sever at Minorca, and that on the coast of Guinea, seem to differ, as I sound upon examining that accurate writer after I returned to England; for I was so unfortunate as not to have his book with me.

<sup>\*</sup> The land exhalations affected his patients; which was not the case on board of the Weasel, after we left Gambia river.

<sup>†</sup> So Blanchard defines that disease.

#### SECTION IV.

## The Method in which the Fever was treated.

I ALWAYS began with a vomit, and gave it as foon as the patient complained, unless he was then in a ftate of perspiration. In that case I encouraged the perspiration, either with acidulated drink, or fal. nitr. in it. Soon after the perspiration was over, I administered the vomit, which was tartar emetic, except when the patient was purged, then I gave the pulv. ipecacuan. The manner in which I administered the tartar emetic, was by dissolving three grains in half a pint of simple water, of which two fpoonfuls were taken every half hour until it began to operate, which was commonly after giving it the third or fourth time; by that means it not only vomited him well, but likewife, often, operated once, twice, or more by flool, and frequently by perspiration. Most commonly it was worked off with warm water.

If it was in the evening they complained, and took the puke, I gave them, about an hour and a half after its operation, a faline draught, with more or less of the effence of antimony, to keep up the perspiration, if there was any, or otherwise to promote a perspiration; and allowed them plenty

of fage tea or barley water, either acidulated, or with nitre \*.

The faline mixture was made with lime juice, or with elixir of vitriol. I often used the spiritus Mindereri likewise. Those mixtures were always diluted with simple water, sweetened with a little sugar, to which a due proportion of either Huxham's essence of antimony, or emetic tartar, was added.

But if the patient complained in the morning, and took his vemit then, whether he had one or two ftools therewith, I generally gave, about two hours after its operation was over, an ounce of fal. cath. amar. diffolved in half a pint of thin water gruel, or barley-water; one or other of which they drank to affift the purge; and if the fkin was hot and dry towards night, I ordered faline mixtures as before mentioned.

As the stomach was always loaded, and the intestinal canal contained faburra in the beginning of the fever, as appeared from the operation of the emetic and purging medicines, I judged those noxious contents ought to be evacuated as soon as possible, which that method effected in a gentle manner.

They who had diarrhea accompanying the fever, were either ordered manna with the falts, or rhu-

<sup>\*</sup> I was often obliged to use the mineral acids for want of the vegetable acids.

barb alone to purge them; and they had no faline mixture prescribed, nor acid in their drink.

If it was the fecond day before the purge was taken, the patient had no other medicine until night, when the faline mixture was ordered with diluting drink; otherwife I ufually gave the faline mixture every four hours, and plenty of cooling drink, on purpose to procure a remission. in fome cases, notwithstanding this refrigerating, relaxing, and aperient method, I was obliged to give fmall quantities of falts every other day, without which they never had a ftool, though fuch patients drank commonly tamarind beverage. In others it was necessary at times to give draughts of an infusion of camomile, to promote the discharge of bile upwards, as nature indicated. But when the vomiting was violent or frequent, I added fome tinct. thebaic. to the faline mixture, and likewife for the head-ach, when it was very violent, both of which it relieved only while the effect of the dofe continued.

In this manner, the mixture with the antimonials and their drink was administered for several days, except in the cases attended with the purging, in which I gave rhubarb and ipecacuan. with opiates in small doses, and demulcent drink.

Besides those, I administered at different times, when the pulse began to sink, when the head-ach was vehement, or other nervous symptoms appeared,

the

the pulv. contrayerv.; infusion of Tinct. serp. virg.; Aquæ spirituosæ; Sp. vol. aromat.; Consect. cardiac.; et mosch.; and I sometimes experienced the good effects of them, particularly when blisters were applied. They raised the pulse, relieved the head-ach, quieted the nervous spasms considerably, and removed the stupor or coma \* in a great measure. But bark was too often wanted to complete the cure. Camphor was serviceable in one case only.

They who had the fever in its mildest form, now and then eat a little sago, thin rice gruel, or panada, with a little sugar and cinnamon; but the rest would not swallow any food, until a favourable criss was obtained.

# SECTION V.

# Cases of the remitting Fever.

## 'CASE 1.

C. P. aged about 32 years, very flout, of a healthy complexion, who had never been in a hot climate before, complained, the 14th August p. m. of sickness at stomach, i climation to puke, headach, thirst, and that he was much out of order. His pulse was very little quicker than natural,

<sup>\*</sup> Query—Did Cleghorn consider the profound coma, apoplexy?
though

though his fkin was hot and dry; and his tongue was of its natural colour. I prescribed the emetic tart, which operated very well; and at night gave him a faline draught, after the usual manner, and barley water, with nitre, for drink.

2d, A. m. he found himfelf rather better; but about three p. m. he became very hot, thirfty, and uncafy. A dose of falts and manna were ordered for him; and as foon as it was worked off, the faline mixture was repeated every hour, and tamarind beverage allowed him for common drink.

3d, He spent a very bad night. His skin was very hot and dry, his countenance much slushed, the blood-vessels of the tunica conjunctiva of the eyes were quite turgid; his tongue was dry and foul, and his pulse quick and full. But he complained only of being hot, that he was much out of order, and that nothing which he took had any taste. The saline mixture was well diluted, and repeated every two hours, with nitre in it, and tamarind beverage allowed for drink. He had one stool in the day.

4th, He was not fo reftless in the night, but made water several times, with scalding, and perspired freely most part of the night. A. m. he was not so hot, and seemed more lively; but his tongue continued foul; and though he was very thirsty, no drink pleased him. P. m. he puked some phlegm several times, he became hot, and exceed-

ingly

ingly reftlefs, until he was relieved by profuse perspiration. A violent paroxysm foon followed, with pain and heat in his right foot, giddinefs, anxiety, and great inquietude. His pulse was strong, but not quick; his skin was exceedingly hot, bedewed with clammy moisture, which impressed a very disagreeable fensation on the singers after feeling the pulse; the tongue was white, dry, and chapped in the middle, with a red margin, and trembled much when put out. p. m. his pulse was extremely quick, his skin dry, his urine very high coloured, with a cloud at the top; he was afraid to fleep, because of frightful dreams and notions, which made him start out of short flumbers; he was apprehensive of dying, and wandered a little. He continued his mixture with nitre. At three p.m. eight grains of camphor were prescribed every three hours, and his drink was frequently changed. He had two copious flools.

5th, He passed a restless night from inquietude, and at four a.m. his retching returned; after which he had a copious loose stool, and perspired freely. The fever and all the symptoms gradually decreased, and a persect remission began at noon, when his urine was still high coloured, with the cloud subsided nearer to the bottom of the glass\*. He continued his medicines, as pre-

<sup>\*</sup> This paroxysm terminated the second period of the fever.

VOL. 1. G fcribed

fcribed the preceding day, until noon, when a drachm of the pulv. cort. Peruv. was ordered every hour; but after 9 p.m. he only took it every two hours for the night. It agreed very well with him, though only given in water, and procured him feveral copious ftools.

6th, He continued cool and eafy after a tolerable night's rest, got up, and was shaved and shifted. He complained then of giddiness, great weakness of his loins, and had no appetite \*. At 6 p.m. the pain and heat returned in his foot and leg, with head-ach, and generalheat; and at 7, the fever, and all the former symptoms, with increased violence, returned. He took his bark regularly every two hours, until the paroxysm commenced, when his stomach would no longer retain it. Chicken broth was allowed him, and one dish of cossee, which he was desirous of, on the intermediate hours. The camphor †, the saline mixture, and his drink, were repeated as on the 4th.

7th, He had an exceedingly bad night. A. m. his pulse was foster; but the symptoms continued, though he was in a state of perspiration. He raved, felt his head quite light, and his tongue was black. At noon he fell into a very sound sleep, which continued till 7 p. m. with a moderate perspiration. He sound himself quite cool and

<sup>\*</sup> I think his fatigue brought on the following paroxysm.

<sup>†</sup> This is the only case wherein the stomach would bear it.

eafy when he awoke, and never had another paroxyfm. His medicines were continued until he fell afleep, and as foon as he awoke, a drachm of the bark was ordered every hour, which was repeated regularly throughout the night.

8th, The bark was continued afterwards, until he was perfectly recovered. He took \* ten ounces in all.

Until the 10th day after his being taken ill, his head was remarkably affected from the least drop of wine either with his bark, or diet, which was very light. A confiderable time after he got well, he complained of great weakness in his eyes, and of the pain in his foot and leg.

#### CASE 2.

FIRST day of the patient's illness, M.R. aged about 27 years, who was very healthy, though of a thin habit, and delicate constitution, on the 25th August, at noon, in feeling the boy's pulse, as before mentioned, received an instantaneous shock, as if he had been strongly electrified; which was immediately followed by such prostration of spirits and

<sup>\*</sup> Doctor Lind has omitted the three ounces which he used while he was in a convalescent state, and therefore says, he only took seven ounces. See the note, p 64 of his book on hot climates.

ftrength, that he could with much difficulty get upon deck, or, for fome time, be kept from fainting. From the commencement of the fever on board, he had taken, every forenoon, a drachm of the pulv. cort. with a little of the tincture of bark, in water, which he now took as ufual; but though he repeated his draught, p. m. his fpirits continued greatly depreffed; he was quite pale towards night; his memory failed him very much; he was continually apprehensive of being furprifed; was plagued with filly notions; and was giddy at times; very little fatigued him, and he had no appetite. His pulse was rather languid, and his fkin hot and dry.

2d, His fleep was much interrupted with frightful dreams; wandering pains; and weakness of his loins. A. m. he had no appetite; his skin was dry; and he had no particular complaint, though he found himself much indisposed. However, he still attended his duty, took his bark as on the 1st, and a glass of wine in the day as usual. At night he became very hot and restless, and all his symptoms were aggravated.

3d, He was troubled with great inquietude and uneafiness in the night. A. m. in every respect, he found himself worse; when he took some tart. emet. which brought much bile off his stomach; and, in two hours after, a dose of salts and manna, that operated very well. P. m. his sever, now

accom-

accompanied with thirst, continued; and at bedtime he took a cordial anodyne draught, composed of faline mixture, spirit of cinnamon, with ess. ant. gut. xx. et tinct. theb. gut. x.; and drank freely of weak acidulated tea through the night.

4th, He had no fleep, though he perspired freely, and was easy in the night: a.m. his pulse was pretty regular, his skin cool, a sediment appeared in his urine, which was high coloured, and he was in better spirits. He took an ounce and a half of the cortex in six hours, and never had any return of his sever, notwithstanding he daily continued attending the sick. He did not leave off taking the cortex regularly for a considerable time.

#### SECTION VI.

# Respecting the Cause of the Fever.

The time and manner, in which the preceding case occurred, plainly show, that remitting severs are contagious. But \* I am not of opinion, that Dav. Clency, who came from the Hound sloop, on board of the Weasel, and fell ill the day after of a simple tertian, with distinct intermissions, as appears from his case, intected the ship's

<sup>\*</sup> The author repeats here what he thought at the time.

company; notwithflanding the ferjeant was the very next day feized with a tertian fever, and all the protei-form appearances (if I may be allowed the expression) in which that fever appears: and though that excellent practitioner, Dr. Lind, in converfing with him, faid he was of opinion that Clency had brought infection on board. Yet one would be led to imagine, from the fimilarity of the two cases, that the serieant was infected from him. But at that rate he must have caught it in the first paroxysm of Clency's fever; for Clency only had one paroxysm before he was seized \*. Besides, the remitting fever did not make its appearance before the ferjeant and Clency were quite well. I must likewife add, that if it was effentially one and the fame fever, no two fevers ever differed more apparently than the tertian and remittent †.

What confirmed me more ftrongly in that opinion was, that both of his Majesty's sloops, the Hound and Merlin, which were then at different places on the coast, the one at Senegal, and the other at Sierra Leon, had the same remitting fever as we had on board of the Weasel; and buried each of them the same number of men, if I am rightly

informed,

<sup>\*</sup> Which renders it improbable that Clency infected the serjeant, in my opinion.

<sup>†</sup> I am now of a very different opinion, and have no doubt but it was the same fever, only in a milder form, in the two cases which appeared first.

informed, without having contracted it by infection. The rainy weather, and our own indifcretion in going a fhooting, in my opinion, were fufficient to occasion the fever. See the abstract thereof, p. 50, 52, 54.

However, whether my opinion on this head be just, or otherwise, it is by no means advanced with a design to inculcate less care, or caution on board of healthy ships to avoid, by all possible means, having more intercourse with sickly ships than is absolutely necessary; and much less to encourage officers to admit sickly men on board in any climate, either from a ship, or the shore. A very sickly man was received on board of a ship \*, of which I was surgeon since that time, on a remarkably healthy station, out of charity, contrary to my advice, of which the consequence proved very satal, and the sever, occasioned thereby, continued in the ship for months after.

Before I conclude this part, it becomes necessary for me to assign a reason why I did not say any thing of, or even mention, the bark amongst the remedies which I made use of in the general method of treatment of the sever. I knew it was the only medicine which could possibly have saved some, if not all the lives of those who died, but as I bad it not to prescribe in sufficient quantity to render it effectual, I could not say, without doing

\* See page 90.

much violence to my own opinion, that it failed in any case, and therefore thought it most proper to pass it. Besides, was I to advance that it failed in curing of this sever, because I did give it, though not liberally enough to render it essectual, it might be productive of much mischief, if any younger practitioner than myself was thereby prevented from depending wholly, in a manner, upon the bark, to cure the remittent sever.

So far from offering tuch an erroneous affertion, I thought it a duty incumbent on me to acquaint the commissioners for fick and hurt, as soon as we arrived in England, that I was perfectly convinced most of the men, who died of the sever, had been lost from my having too little bark; and that I had brought home several very bad cases from the same cause, notwithstanding I had carried out with me more than three times the quantity which was sent on board from apothecaries' hall for soreign service,

But in the malignant cases of the fever, the stomach would seldom retain a single dose without the tinct, thebaic, being joined with the cortex.

However, I have fince experienced, that with the addition of wine only, the stomach has been enabled to retain it when the remission was very imperfect \*.

I am of opinion that a reproach is frequently thrown out, not only against the bark, but against

\* See Part V.

other valuable medicines, by practitioners giving them in quantities inadequate to the difease with which they have to cope; or in a manner not proportioned to the expectations which they form in administering them, which amount to the same in consequence.

If gentlemen, therefore, instead of positive general affertions, that such and such remedies failed in certain diseases, would candidly relate the particular cases in which they were administered, and at the same time take care to mention what quantity of the medicine they exhibited in a dose, how often it was repeated, the patient's manner of living, &c. they would do more towards promoting the real knowledge of medicine than by all the dogmatical affertions which they can possibly advance, and they would be much more regarded by every gentleman of candour and eminence of the profession.

#### CHAPTER IV. \*

Observations on board His Majesty's Ship Æolus, the Complement being 180, and augmented to 200 Men, employed at Newfoundland.

Early in the year I was appointed to the Æolus, and neither fickness nor any thing remarkable, respecting the health of the ship's company, occurred until the end of September, when

NICHOLAS FLOWERS, a fisherman, aged about 30, though very ill was received on board contrary to my advice. His illness proceeded from great fatigue, irregular living, and poor diet. After he had been lying about for several nights in his clothes, upon chefts, he complained to me, on the 27th of September, of extreme difficulty of breathing, violent palpitation of the heart, excessive weakness, great depression of spirits, and infatiable thirst, though his tongue was nearly of its natural appearance; his countenance was morbid, and his pulse quick and irregular, yet hard. He was twice, within six hours, let blood; and thirty drops of

antimonial

<sup>\*</sup> This chapter, as the reader will observe, interrupts the continuation of the Observations on the Coast of Africa; but the author judged it necessary to insert it, that no chasm might appear in the chain of the work.

antimonial wine were prescribed every four hours in barley water, which, with a little nitre, was his common drink. P. m. he vomited to-day.

28th, He thought himfelf much relieved, but his thirst continued; he was troubled with inquietude, and his pulse was small and soft. The blood taken from him was sizy, yet the crassamentum was very loose. The antimonial wine was continued, and a large blister applied to his breast.

29th, He breathed much freer and eafier; but he was much weaker, and more depressed; cordials were therefore prescribed.

30th, He was extremely weak. P. m. he was covered with cold fweat, became quite restless, and his pulse more languid. He continued his cordials, and, being costive, an enema was injected.

Oct. 1, The cold fweat continued; his extremities were cold; the pulse was tremulous, with fubfultus tendinum, before he died\*. The cordials were continued.

When the preceding patient came on board, there were only two men on the fick lift—and they complained of cough only, to which one of them was fubject, and the other had been ailing about three weeks; but they were both in a convalescent flate—and when he died, no alteration in the fick

<sup>\*</sup> This was one of those cases of febrile infection of which I have hardly seen one recover. He was too late in applying; and was not treated as I should treat such a case, was it to come under my care now.

lift had yet taken place. The day after his death, the patient, who had been long fubject to cough and pain of his breaft at times—which proceeded from living in a shallop, where he had been almost stifled with confined air, and smell of bulge water—after being in a convalescent state, complained, the 2d of October, of severe pain and oppression about the scrobiculus cordis, of dyspnæa, urgent dry cough, head-ach, and thirst. His pulse was quick, small, and hard, and his skin was dry and hot. Twelve ounces of blood were taken away, and twenty-five drops of antimonial wine in pectoral decoction, or common emulsion, were ordered every four hours.

3d, Though he had feveral stools yesterday, and perspired freely in the night, he was not relieved, and his tongue was rough and parched. The crassamentum of the blood was loose, without buff. P. m. an exacerbation came on, with an oppressed pulse. He continued his antimonial wine, and was again let blood, to eight ounces in the afternoon, which relieved him.

4th, His pulse was flow, weak, and irregular. P. m. an exacerbation of heat and uneasiness came on; he was costive, and the coat on the blood became thicker, but the crassamentum was looser. He continued his medicines.

5th, He passed a restless night from cough; though he perspired. He continued costive. P. m. he selt severe pain in his breast when he coughed, though

though flools had been procured. A blifter was applied to his breaft.

6th, 7th, and 8th, He was much relieved and expectorated, but the cough was fill urgent.

9th, 10th, and 11th, He continued to recover. Medicinis adhuc utitur.

12th, He complained of costiveness, and took an opening draught.

13th, He complained of pain in his breaft, great difficulty of breathing, while the pulse was small and oppressed. He was let blood, and took his antimonial wine. He was now effectually relieved; but sometimes he became hot p. m. and the cough, with expectoration, continued, when I fent him to St. John's hospital, the 26th October, 1770.

I have been particular in relating the preceding case, because it was the first which occurred after Flowers's death. The season of the year was favourable to the rise of pulmonic affection, no doubt; and though some of the twenty cases which sollowed this man's, while I belonged to the ship, were attended with catarrhous symptoms; and though it did not strike me at the time, I am sully satisfied that the disease was sebrile insection. Upon no other principle can the debility which sollowed the very gentle evacuations made use of in the treatment of it be accounted for. I shall only relate the two cases which terminated satally.

SAMUEL MILLAGE, marine, the 28th November 1770, at 11 a.m. was feized with shivering, Incceeded by burning heat, which ended in a profufe fweat, that continued until 4 p. m. On the 29th, at 5 a.m. a paroxyfm of the fever returned, and when I first saw him, he complained of much pain about the præcordia, a frequent short cough, head-ach, fickness at stomach, and thirst. His tongue was white; he was let blood very moderately, took a gentle vomit, and thirty drops of antimonial wine at bed-time.

30th, His head-ach left him; he took an opening draught, and repeated the antimonial wine at bed-

Dec. 1, He complained of faintness and of weaknefs, especially about the præcordia, where he often laid his hand; and of urgent cough, which brought up phlegm only. He lay on his back; his tongue was white and rough in the middle, and his pulfe was rather full and quick. A blifter was applied between his shoulders, et gut. xij. of vin. antimonial. were given him in drink every four hours. V. S. and only five ounces taken away. Tart. emet. gr.  $\frac{1}{6}$ , was given him every two hours, and a bolus of five grains of camphor.

2d, He perspired, and passed a restless night; his pulse was rather full. Five ounces of blood were again taken from him, and the gr. i of tart. emet. given him every two hours. P. m. he was anxious anxious and comatofe; the pulse was small and irregular; the skin dry and hot; and the tongue was of its natural colour. The blood first taken from him was little in quantity, not fizy; the crassamentum in too great proportion to the ferum, but of loose texture. The crassamentum of the last taken away was of looser texture, and blacker.

3d, He was still comatose, with his eyes half shut; no drink pleased him; he complained of pain in his back, and the pulse was soft. I gave him nitr. gr. x. et vin. ant. gut. xv. in a spoonful of spirit of Mindereri, every two hours, and the camphor bolus every four hours.

4th, A.m. a remission—turned on his side at times; and in the evening two copious green stools relieved his back. He continued his medicines.

5th, An exacerbation, with delirium, deprived him of rest in the night. A. m. the skin was very hot and dry. At noon, he perspired about his head and face. At 6 p. m. for an hour and a half, he had a profuse perspiration over him. At 9 p. m. he perspired again about the face and head, while the skin in other parts was dry and extremely hot; the pulse was small and irregular. He continued his medicines, and blisters were applied to his ankles.

6th, Sometimes he perspired in the night; and at other times, though his skin felt hot and dry, a very hot and moist exhalation arose from his body. An exacerbation, with subsultus tendinum, and catchings,

catchings, came on. His eyes were shut, and his countenance was ghastly; he was speechless; he scratched his head, and picked the bed-clothes. The respiration was convulsive, with an involuntary discharge of sæces. Blisters were applied to his thighs; and besides his other medicines, he took, every four hours, ten grains of cordial confection.

7th, 8th, and 9th, Very little alteration happened; a perspiration broke out on him, and continued a very short time. The blisters were renewed, and sinapisms applied to his feet. The dose of concardiac, was increased to gr. xv.; and on the 7th day he took, every six hours, ten grains of musk. A draught of aq. pur. zi. aq. cinn. sp. zij. tinct. castor, gut. xx. con. cardiac, gr. x. syr. com. q. s. was given every hour on the 8th.

10th, He perspired disagreeably about the head; the convulsive symptoms and inquietude increased. I ordered him in one dose, mosch. gr. xx. but about 2 p. m. he died.

WILLIAM HINCHCOMB, the 1st December, was chilly and hot alternately all day.

2d, When he first complained, I found him hot, thirsty, and his pulse quick, with sickness at stomach. He was let blood, took an emetic, et vin. ant. gut. xxx. at bed-time.

3d, He complained of debility, depression of his spirits, and universal pain, especially over the

eyes.

eyes. A gentle purge, and vin. ant. again, at bed-time, were ordered.

4th, His depression was less, but he was apprehensive, giddy, hot, thirsty, and the tongue was brown in the middle, with an unusually red margin. He took the antimonial every six hours, and nitre in his drink.

5th, The apprehension and depression increased, with pain and oppression about the præcordia; the countenance was slushed, the thirst continued, yet no drink pleased him; the middle of the tongue was still brown, but the edge was now white and rough. He took the sp. Minder. antimonial and nitr. every two hours, as Millage had done.

6th, He passed a very restless night, though he sweated profusely, and voided urine copiously, which became very turbid on standing. A. m. he perspired freely about the face and head, but he lay on his back. He took his medicines, and tart. emet. gr. ; every two hours; and in the afternoon a blister was applied to his back, an enema administered, and the camphor bolus of five grains was ordered every four hours. In the evening, a slight remission, after four stools from the injection, was succeeded by an exacerbation of heat and dry cough; the tongue was dusky and chapped in the middle.

7th, Slight remission first part of the night, but foon became more uneasy and hot. Towards you. 1. Honoring

morning he fweated; but the cough, thirst, inquietude, and apprehension, distressed him. He continued his medicines, and blifters were applied to his ankles.

8th, The cough haraffed him; he vomited poraceous matter feveral times, and was no better. He took tart. emet. gr.  $\frac{1}{4}$ , every half hour, until the stomach was washed out, and afterwards his medicines, as before prescribed.

9th, He passed a restless night; though he had little heat, his thirst continued. No alteration was made in his medicines.

10th, He was no better; at 9 p. m. he began to rave; fordes collected about his teeth; his lips grew black; a diarrhœa came on. The camphire bolus was given every four hours, and his mixture every two hours.

11th, Much the fame. P. m. his countenance appeared bloated; his teeth and lips foon became foul after being cleaned, and the tongue was black and chapped. In the evening he was comatofe. He took his medicines, and blifters were applied to his thighs.

12th, The delirium remitted, but he continued comatofe. Diarrhœa and languor haraffed him. Besides his former medicines, he took con. card. gr. x. every hour, and a spoonful of the following mixture every two hours: pulv. facchar. alb. contrayerv. ā zij. sp. vol. arom. ziij. aq. pur. zviij. f. m. 13th, 13th, The diarrhæa abated; the urine was high coloured, and deposited a slaky mucus, which was of a pink red on the upper part. The fordes continued to collect about the tongue, teeth, and lips, as soon as they were cleaned. No alteration of the medicines.

14th, He passed a restless night; the appearance of the urine was changed. He became deaf, and his pulse was irregular; he voided a hard lump in his stool; he continued his medicines.

15th, He was delirious, and retched in the night. A. m. languor, giddiness, and cold sweat on his face, harassed him. The urine was turbid; and p.m. subsultus tendinum. His medicines were continued, a clyster was occasionally administered, and sinapisms were applied to his feet.

16th, Delirium and inquietude haraffed him in the night. The appearance of the urine was changeable. A hard, lumpy ftool procured by a clyfter. He was peevifh. He continued his medicines.

17th, He passed the night ill, and had a slight remission. A. m. the urine is very changeable; and a hard lumpy stool again voided by a clyster. No alteration of his medicines.

18th, He became deafer, and the respiration more laborious; all the thorax pulled violently upwards in every inspiration. The countenance was ghastly: a blackish sediment in his urine. Ut heri.

19th, The urine was high coloured, turbid, depositing a blackish light sediment. P. m. catchings, convulsive motions of his eyelids; sighed deeply at times; great delirium; a thready quivering pulse; and the urine often varied its appearance. Besides his other medicines, he took p. m. a spoonful of a cordial mixture every hour. Aq. cinn. sp. 3ij. tinct. castor. 5ij. aq. simp. 5iv. syr. com. q. s.

20th, At fix in the morning he recovered his fenses, and a drachm of the Peruvian bark was prescribed every hour. A rattling was observed in his throat, at times, last night. At noon he had a hot sweat about his head and face; the feet became cold. Seven p. m. the bark disagreed with him; he raved, looked wild, his eyes were watery and glassy, and matter collected in the internal cauthi. About 10 p. m. he became comatose. I continued his medicines.

21st, Languor, and constant retching; his eyes were half shut, and sunk in the orbits; his upper lip was convulsed, and his arms and hands were tremulous; the fect were cold; he raved, and talked of eating, but could not. He picked the bed-clothes, and every thing about him; and at 11 p. m. he became very restless. Every two hours he was ordered cort. Peruv. pulv. 3ss. with a little wine every hour, or the castor julep.

22d, He paffed a very reftless night; would take nothing; grouned and raved greatly; his eyes were turned

turned up; his pulse quivered rather than beat; his extremities became cold, and there seemed to be little heat in his body. At noon he picked the middle of the upper lip until it bled; gazed at his hands; his skin was tense and dry, and a seeble subsultus tendinum. He died at 5 p.m.. No alteration was made in his medicines \*.

#### SECTION I.

#### Remarks on the Treatment.

Besides those three cases which I have related, eighteen men were seized with sever before I lest the ship in January 1771; some of whom had it slightly, but seven were sent to the hospital. Some of them were seized with catarrhous symptoms peculiar to the season; but one only seemed to receive benefit from the antiphlogistic treatment; and his case was pleurify. In none of those cases was the bark administered, so early or so liberally as to promise success. I had not seen enough of practice, as yet, to enable me to overcome the preju-

dices

<sup>\*</sup> In stating those cases, I have only inserted the most remarkable symptoms; though in my notes I have been very minute in marking them, often every two hours, when I visited them.

dices of education, of example, and universal custom. Unfortunately I possessed the prevailing idea, that fevers in a cold climate were inflammatory; and that bark, as well as every other tonic, would be highly improper until towards the decline of the fever. This fully explains the reason why my practice then was far more antiphlogistic than tonic.

I was removed, early in January 1771, to the Arrogant, a 74, with a complement of 600 men. But as the was very foon paid off, and all the patients were fent to the hospital at Haslar, I had no opportunity to make any observations.

# PART III.

METEOROLOGICAL OBSERVATIONS, AND STATE OF THE SICK LIST, ON BOARD OF HIS MAJESTY'S SHIP RAINBOW.

## CHAPTER I.

Diary of the Weather, from the 30th of December 1771, until the 26th of August 1772.

Time.	Hours	Ti ermo-	Latitude, d. p. cr r.	Longi- tude 1n, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo-sphere.
1771 Dec.: 0 Die Lunæ	77	55 5,	Off the Lizard.		24	f NE t ENE **		cl.
31	7 7	57 57	47° 29″	From the Lizard 03° 33″W	25	ENE ***	•	cl.
Jan. 1 Die Mercu- rii	7 12 7	57 58 57	45° 27″	06° 32 W	26	ENE ESE ***		cl.
2	7 12 7	58 61 56	42° 40″	07° 58″W	27	f ENE t SEbS ***		cl.
3	7 12 7	58 57 57	39° 40″	09° 05″W	28	f ENE t SEbE ***		cl.
4	7 12 7	59 60 60	37° 45″	09° 48″W	29	fENE t SEbS **		cl.
5	7 12 7	61	35° 22″	10° 20″W	m. a. m.	f ENE t SEbS ***	• • •	cl.
6	7 12 7	04	33° 05″	10° 16″W	2	f ENE t SEbS ***		cl.
7	7 12 7	65	Madeira		3	ESE **		cl.
8	7 12 7	69			4	ESE **		cl.

## STATE of the SICK LIST, &c.

- 30. Sailed from Spithead yesterday about noon, in company with his Majesty's sloop Weasel; five with colds, and slight fevers in the list.
- 31. One with cold complained; six ill.
  - Three returned to duty, and three remain in the list. The air is much milder.
  - 2. One with cold added to the list; four ill. A cold evening.
  - No alteration of the sick. The colds are feverish complaints, with cough.
  - 4. One with cold admitted; five sick. Very pleasant weather.
  - 5. The sick, all of whom proceeded from irregularities, are better.
  - One complained of cold; six ill. Seven p. m. we anchored at Madeira, in Foncheall Bay, which is very open.
  - 7. One recovered, and another admitted with cold or slight fever; six sick.
  - 8. No alteration in the list.

- (7 )								
Time.	Hours	Tl.~mo-	Latitude,	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Aumo- spice.
Jan. 9	- 12 7	6			5	WbN * *	\$ 0	cl.
10	7 12 7	68 69 68			6	f SW t NNW * *		cl.
11	7 12 7	69 70 70			7	WbN ***		cl.
12	7 12 7	68 71 69			8	f WbN tWSW**		c.
13	7 12 7	69 69			9	f EbN t ESE		c,
14	7 12 7	69 71 69	Madeira.		10	f EbN t ESE **		cl.
15	7 12 7	70 71 70	30° 35″	from Ma- deira 00° 42″ E	11	E ESE **		cl.
16	7 12 7	70 71 69	Teneriff.	00° 55″ E	12	E **		cl.
17	7 12 7	72 72 70			13	Nly **		c.
18	7 12 7	73 71 69			14	Nly**	•	cl.
19	7 12 7	70 70 69			15	Nly **		cl.

#### STATE of the SICK LIST, &c.

- 9. A case of contusion complained; seven ill. A warm day.
- 10. One case, a cold, recovered; six patients.
- 11. One case of cold is venercal; one with cold admitted; six ill.
- 12. The case of contusion recovered; five in the list.
- Four of the patients from colds recovered; the case of cold remaining in the list is rheumatic.
- 14. One with rheumatism admitted; two ill. Sailed at four p. m. in company with the Weasel.
- 15. One feverish patient admitted; three sick.
- No alteration of the sick. Anchored at four p. m. in St. Cruze Road, which is very open.
- 17. One feverish complaint admitted; four patients employed watering the ship; the water very good. A. m. sultry.
- 13. No alteration of the sick. A. m. very sultry. A fog continually over the high land.
- 19. Two feverish complaints are well, and two admitted; four ill.

Time.		I co	1 1 * 4	1 :	l s	5 .	1 6 1	
Days.	Hours	Thermo-	Latitude, d. p. or r.	Lugi- tu e in, m o o	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
J :i. 20	7 12 7	70 70 19			, p. a. m.	V **		c.
21	7 12 7	70 71 71			17	V **		c.
22	7 12 7	72 71 70			18	t NW tWSW**		cl.
23	7 12 7	72 71 70	27° 37″		19	f W t NW***		cl.
24	7 12 7	71 71 70	24° 37″	From Teneriff 00° 31″W	20	WNW**		C.
25	7 12 7	72 71 71	22° 30″	01° 14 W	21	f WNW t NNE **		с.
26	7 12 7	72 72 71	20° 52″	01° 12″W	22	V **		С.
27	7 12 7	72 72 72	19° 06″	00° 23″W	23	f WNW t NE		C.
28	7 12 7	73 74 72	18° 05″	00° 26″ E	24	*		с.
29	7 12 7	74 74 73	17° 48″	00° 39″ Е	25	Nly*		С,
30	7 12 7	74 73 73	16° 04″	00° 22″ E	26	Nly *		c.

- One case of contusion, and one with feverish complaints, admitted; six ill.
- 21. One feverish patient is well; and one with contusion admit-ted; six sick.
- One feverish patient well; five in the list. Sailed with the Weasel at 3 p. m.
- 23. No alteration of the list.
- 24. One case of contusion, and one of rheumatism, are well; three in the list.
- One feverish patient recovered; two in the list. Very pleasant weather.
- 26. The case of contusion is well; one in the list.
- 27. No alteration of the list.
- 28. The case of rheumatism, now become an ulcer, in the list only.
- 29. No alteration of the list,
- 30. Only one in the list. Anchored with the Weasel off Senegal Fort at noon.

	13:							-	
	Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
	an. 31	7 12 7	74 73 72	15° 57″	From Senegal 00° 17″W	27	N ***		el.
I	o. 1 Die urni	7 12 7	73 75 73	15° 27″	03° 16″W	28	NbE NNE**		cl.
	2	7 12 7	74 75 75	15° 11″	06° 04″W	29	NNE **		c.
	3	7 12 4 7	74 78 80 78	14° 25″		m. p. m.	NNE**		c.
	4	8 12 4 8	75 80 81 79			2	NNE **		c.
	5	8 12 8	76 79 77			3	NNE **		cl.
	6	8 12 8	76 77 74			4	NNE **		cl.
	7	8 2 8	74 74 74	13° 41″	From St. Jago 02° 05″ E	5	NE **		cl.
		8 2 8	74 73 73	11° 49″	04° 49″ E	6	NE **	1	cl.

- 31. At eleven a.m. sailed, and left the Weasel. No alteration of the list.
  - No addition to the list. The thermometer was placed in the captain's cabin.
  - 2. The one with ulcers still in the list. At six p. m. anchored in Praya Bay—St. Jago, one of the Cape de Verde Islands. The land round it is high, except a small beach where boats land, beyond which is a marshy vale, where some wells are, of which the water is very indifferent.
  - 3. Anchored rather too near a very sickly outward-bound Dutch East Indiaman. Above 100 bad of the remitting fever, and dysentery, on board of her, of which diseases many have died. A constant fresh sea breeze over the high land. On the booms over the water, the sentinel was taken ill in the night. Two in the list.
  - One seized last night with feverish symptoms; three in the list. Yesterday's admitted patient a remitting fever. P. m. very warm.
  - 5. Yesterday's admitted case is well. One with contusion, and one with fever, who was taken bad the 3d, admitted; four patients. Several of the gentlemen, and of the men, perceive a very disagreeable smell from the Dutch Indiaman at times, when she happened to be to windward of us. Plenty of hogs, goats, turkeys, and fowls, to be bought for old clothes on shore; but they have no vegetables.
  - 6. One complained of fever. Yesterday's admitted fever is a remittent; five patients. Four p. m. sailed. The people bought a good many hogs, goats, &c.
  - 7. One with feverish symptoms admitted; six sick.
  - 3. Two feverish cases admitted; eight ill. The feverish complaints are slight remittents.

Time		6	ا ري ـ ا	1	1 00	1 .	1 8	1 5 .	ا ي ن
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.		tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb.	8 12 8	73 72 74	10° 06	07	° 07″ I	7	NE *		cl.
10	8 12 8	72 72 75	09° 09	)" OS <sup>4</sup>	° 26″ I	8	NE*	×	cl.
11	8 12 8	75 78 77	08° 44	t"   09°	° 36″ F	9	NE *	*	cl.
12	8 12 8	78 79 80	Cape Sic ra Leo OS° 30	n		10	NE *	7.0.4 7.0°7,	h.
13	8 12 4 8	78 80 81 80				11	Sb & lb		h.
14	8 12 4 8	\$0 \$1 82 \$0				12	Sb & lb		h.
15	8 12 4 8	80 81 82 80				13	Sb & lb	**	h.
16	8 12 4 8	79 80 81 79				14	Sb & lb	煞	h.
17	8 12 8	79 80 80				15	Sb & lb	*	h.

- 9. The one admitted the 7th is well. One feverish case complained, and one with eruptions added to the list. Seven ill.
- 10. One with slight indisposition admitted. Eight in the list.
- 11. The case of contusion, and one with eruptions, recovered. One feverish complaint admitted. Seven ill. At 9 p.m. anchored off Sierra Leon river.
- 12. At 6 a.m. we sailed, and anchored at 5 p.m. in Sierra Leon river. The case of indisposition of the 10th, recovered. One admitted with lameness. Seven patients.
- 13. One added to the list with feverish symptoms. Eight ill. The sea breeze blows over part of the land, which is covered with thick trees and shrubs, with a fog always over them, and which becomes thick towards sun-set. The land breeze blows from high hills, covered in the same manner, which can seldom be seen for fog.
- 14. Two fever patients are well. Six in the list; one is a had remittent. Our watering tent fixed ashore on the beach, which is overflown at high water, and emits noxious exhalations when the tide leaves it. A gentleman and eight men sleep in the tent; and in the night it is covered with fog. It is always hazy on the river, though the sun shines.
- 15. The feverish complaint admitted the 13th is well. Five patients.

  A party of the men is sent ashore every day to cut wood, but comes on board at night. Very good water here, unless in the rainy seasons, when it is thick.
- 16. The lame patient is well. Four in the list. Plenty of fish in the river, but no stock, and very few vegetables to be got on shore; which is chiefly owing to the indolence of the natives.
- 17. One feverish patient recovered. Three in the list. Very heavy dews.

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Time	Time.		o · 1	· ·	1 1	. 1	h	
Days.	Hours	Thermo- meter.	Latitude d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb.	S 12 4 8	78 79 81 79			p. p. m.	Sb & lb *	×	h.
19	8 12 4 \$	79 79 81 79			17	Sb & lb		h.
20	S 12 4 S	79 79 81 79			18	Sb & lb	28.0	h.
21	8 12 8	79 80 80			19	Sb & Ib	×	h.
22	8 12 8	80 79 80	Sierra Leon.		20	Sb & lb		cl. h.
23	8	79			21	Sb & lb	<b>X</b>	h. cl.
24	8 12 8	80			22	Sb & lb	**	h. cl.
25	8 12 8	81			23	Sb & lb	**	h. cl.
26	12	81			24	Sb & lb	**	h. cl.
27	12	80	08° 13″		25	f WNW t NWbW	X	h. cl.

- 18. No alteration of the list.
- 19. One of the remitting fevers, and one of the slight fevers, are well. One feverish patient; two with diarrhea; one with eruptions, and one with cough, admitted. Six patients.
- 20. Yesterday's feverish patient is well. Three added to the list.

  Eight in it.
- 21. One of the cases of diarrhoa of the 19th is well. Seven in the list. The sea and land breezes are very irregular.
- 22. A patient with deafness admitted. Eight sick.
- 23. A feverish case admitted the 19th is well. The Weasel came in. Her men were seized with catarrhous complaints while they lay at Senegal, in thick, foggy, disagreeable weather, and are not yet well.
- 24. Seven patients. The dews are less than they were.
- 25. The other case of diarrhoa of the 19th, and one of the fe-'verish of the 20th, are well. Five patients. None of the Weasel's men sleep ashore.
- 26. A fever patient of the 20th is well. Four sick. Every person on board complains of their sleep not refreshing them.
- 27. One fever patient of the 20th, and one with cruptions, are well; p.m. a slight complaint well. One griped and one feverish patient added; three bad. Sailed from Sierra Leon a.m.

[March,

Time.	Hours	Thermo- meter.	Latitude, d. p or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb. 28	8 12 8	\$0 \$0 \$0	07° 10″	from Sier- ra Leon 00° 23″W	26	N NNE*		h. cl.
29	8 12 8	80 80 80	06° 40′	00° 48″ E	27	V p. m. ❖		h. cl.
Martii 1 Die Sabbati	8 12 8	79 80 79	06° 26′	′ 01° 58″E	28	f NNE t NNW **	144	h. cl.
2	8 12 8	so	05° 40	" 02° 40" E	29	f WNW t N *	200	h. cl.
3	8128	79	05° 20	"	30	f NNW t ESE #	×	h. cl.
4	12	50	04° 46	7	m. a. m	f NWbW t NE	200	h. cl.
5	12	80	04° 20	)"	2	V *	365	h. cl.
6	12	82	04° 15	"	3,	V *	<b>X</b>	h. cl.
7	12.	2 50	04° 16	5"	4	V *	**	h. cl.

- 28. One feverish patient complained. Four sick. A few men slightly sun-burned, who are not in the list.
- 29. Two fever patients admitted, one of them came on board from a merchantman at Sierra Leon. Six ill; viz. three fever; one griped; one ulcered; and one deaf patient.
  - The feverish patient admitted the 27th ult. is a bad remittent; he was one of the watering party at Sierra Leon. Two feverish and two griped patients complained. Ten sick.
  - 2. One of yesterday's admitted feverish patients came from a merchantman at Sierra Leon; he and the other man who came with him were exceedingly nasty; and they complained of having been starved on board of the merchant ship. The one added to the list the 29th ult. is a bad remitting fever. Ten patients.
  - 3. Two'slight cases are well; and one admitted. The feverish patient from the merchantman is erysipelas. Nine in the list; four of them are bad remittents; three of which were of the watering party at Sierra Leon. Always hazy, though the sun shines. Sailing along shore.
  - 4. Another of the waterers admitted with fever. Ten patients. Every thing is very damp and mouldy on board, and wood shrinks amazingly. The sails very much mildewed.
  - 5. No alteration of the sick. The Weasel's men have had gripings in their bowels since we left Sierra Leon, which cannot be owing to the water, because our men have the same. Very heavy dews.
  - 6. A waterer admitted with fever; and one feverish case last night. P. m. the old ulcerated case, and one slight fever patient, are well. Two feverish patients admitted. Twelve sick.
  - 7. One waterer, and one of the wooders, admitted with fever; and one griped patient added to the list. Fifteen sick; two of them slight cases.

Time.		-	-5 H	0.2 (			L.	-
Days.	Hours	Thermo-	Lativude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds,	Rain or Dew.	Atmo- sphere,
Martii 8	8 12 8	80 80 78	04° 36″		5	V *	*	h. cl.
9	8 12 8	78 78 79	04° 54″		6	V **	2.9.2	h. cl.
10	S 12 8	79 80 81	05° 02″	from Cape Lehou 00° 32″ E	7	V *	36	h. cl.
11	8 12 8	8 81 82	O5° O5″	01° 42″E	8	V *	×	h. cl.
12	8 12 4 8	82 82 83 82	04° 57″ Appalonia		9	SSW **	<u>.</u> @(	h.
13	8 12 4 8	82 82 83 82	05° 00″ Dick's Cove.		10	SW *	×	h. cl.
14	8 12 4 8	83 84	Cape Coast.		11	a. m. V *		h. cl.
15	8 12 8				12	Sb & lb **		h. c.
16	8 12 8	51			13	Sb & lb		h. c.

- 8. No alteration of the list. The evening very cool.
- 9. Two slight complaints, the erysipelas, and the lame complaint, are well. Eleven in the list; seven of them very bad remittents, of whom six were of the watering party. The wind mostly off the land, which is very uncommon here. The day cold. Sailing along shore.
- P. m. the wooder, and the griped patient of the 7th, recovered. An old patient complained of head-ach and nausea.
   Ten bad.
- 11. One griped man admitted. Eleven sick.
- 12. Two with diarrhœa, and one of the waterers with fever, admitted. Fourteen ill. Some slight feverish cases, not in the list. From 1 to 3 p.m. we were anchored off Appalonia, where we left the Weasel. A hot day.
- 13. One of yesterday's cases of diarrhæa is well. Thirteen sick-A. m. we anchored off Dick's Cove, and sailed at 5 p. m.
- 14. The case of diarrhoa of the 12th is well. At noon we anchored at Cape Coast. 5 P. m. I carried the thermometer down into my cabin in the cock-pit.
- 15. One with guinea worm, and one with abscess, admitted. Fourteen sick. Nine a. m. brought up the thermometer to the captain's cabin again. The sea breeze blows fresh, but there is very little wind in the night. Though seemingly a paradox, it is true, that it is hazy though the sun shines bright, without clouds.
- 16. No alteration of the list. The thermometer in the castle—in the shade—is generally at this time of the year between 82 and 85, and highest at noon I am informed.

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Time.	Hours	meter.	Latitude, d. p. or r.	Lonzi- 'ude, m. or o.	N.Toon.	Winds.	Rain or Dew.	Atmo-sphere.
Mortii 17	12 8	32 54 53		1	14	Sb & lb **		h. cl.
18	12	79			15	V 🂠		cl.
19	12 4	78 81 83 82			p. a. m.	V **		cl.
20	12	81 81 84 83			17	V**		cl.
21	12	83 83 81			18	V **		cl.
22	8 12 4 8	81 82 83 81			19	V **		cl.
23	S 12 48	79 82 87 f. 84			20	V **		cl.
24	\$ 12 8	53 84 54			21	V **		cl. l.
25	8 12 8	82 84 84			22	V **		c.
26	8 12 8	81 82 82	p. m. Anama- boe.		23	V *		cl.

- 17. One feverish patient of the 7th, one of the 12th, and a case of diarrhoa with gripes, recovered. One patient with diarrhoa and massea, and one feverish case admitted. Thirteen sick. The Weasel came in.
- 18. One complained of piles. Fourteen ill. As soon as the tornado began, the thermometer fell.
- 19. No alteration of the list. The only vegetables to be bought are yams, and they are not plenty. Limes are very scarce.
  - 20. The head-ach patient of the 10th is well. One case of furuncle, and one lame man, admitted. Fifteen sick. P. m. very hot.
  - 21. The case of abscess admitted the 15th, the feverish patient the 17th, and yesterday's admitted patients, are well. One with nausca and cough added to the list. Thirteen in it.
  - 22. A fever patient of the 6th is well. Twelve sick. It is only cloudy at times.
  - 23. The feverish case, discharged the 21st, relapsed. Thirteen ill.
  - 24. No alteration of the list.
  - 25. The case of nausea of the 21st is well. Twelve patients. A very few fowls only to be got here at present, and no other stock.
  - 26. The relapsed case of the 23d is well. Eleven sick. Sailed at 5 p.m. and at 8 p.m. anchored at Anamaboe,

	Time.   6.							
Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Martii	- - s	F S2	Tantum		24			cl.
27	12 S	84 83	Querrie.					
28	\$ 12 5 8	83 84 85 83	Winne- bah.		25	S **		cl.
29	8 12 4 8	82 82 83 83	Accra.	2	26	V **		cl. h.
30	8 12 4 8	79 83 84 82			27	W **		h. cl.
31	S   12   4   8	\$0 81 83 82			28,	V **		h. cl.
Aprilis 1 Die Mercu- rii	8 12 8	84	04° 11″	From Accra 01° 06″ E	29	f SSW tWSW**		h. cl.
2	S  12  8	83 83 84	03° 17″	01° 56″ E	30	f SWbS t SbW *		h. cl.
3	8  12  4  8	83 85	02° 45″	02° 22″ E		f SWbS t SbW **		cl.
4	S   12   4   S	83 85	02° 17″	03° 20″ E	2	f SWbS t SbW *		cl.

- 27. The fever patient of the 3d, and the case of piles of the 18th, recovered. Ninc ill. Sailed down the coast, and touched at Tantum Querrie.
- 28. The case of diarrhea of the 17th, and of furuncle the 20th, are well. Two with head-ach admitted. Nine sick. Touched at Winnebah.
- 29. The two fever patients of the 29th ult. the fever one of the 4th, and the fever one admitted the 6th, are well. Five ill. We touched at Accra.
- 30. No alteration of the sick. The people were healthy at every place we called at, this being their healthy season. Some have habitual tertians, which they seemed to pay little regard to.
- 31. One case of head-ach admitted the 28th is well. One added to the list. Five ill. There are one with tertian, recovering; two with head-achs; one case of guinea worm; and one of lameness. At noon we took our departure from the coast, with the Weasel.
  - 1. The lame patient recovered. One case of head-ach admitted. Five ill.
  - Two head-ach patients are well. One bowel case from suppressed perspiration, and one with contusion, admitted. Six ill.
  - 3. The head-ach patient is well. One feverish patient admitted. Six ill.
  - The bowel case recovered. One with cough, and one with head-ach, admitted. Seven ill. Very hot, and cloudy at times only.

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Time		0 .	r, r	1 20		s,	or .	ا رين
Days.	Hours	Thermo-	Latitude, d. p. or r.	Lengi- tude in, m. or o.	Moon.	Winds.	Rain	Atmo- sphere.
Aprilis 5	8 12 8	84 83 83	01° 59″	04° 03″ E	3	W *		с.
6	S   12   S	83 82 79	01° 20″	04° 57″ E	4	V 🎄		cl. p. m.
7	S 12 8	81 83 82	00° 59″	04° 28″ E	5	S *	-	h.
8	8 12 8	82 82 83	00° 07″	05° 22″ E	6	V *		h.
9	8 12 4 8	81 81 82 81	00° 17″	06° 32″ Е	7	W		h.
10	8 12 4 8	82 82 83 82	00° 22″	06° 51″ E	8	W *		l. h.
11	8 12 4 8	81 82 83 82	St. Tho- mas's Island.		9	Sb & lb *	• •	h.
12	8 12 4 8	82 82 84 83			10	Sb & lb		lı.
13	8 12 4	81 82 84			11	Sb & lb		h.
	8	83			-		1	

- Yesterday's admitted head-ach, and the feverish patient of the 3d, are well. Five sick.
- 6. No alteration of patients. The men all got wet in the tornado.
- 7. The griped patient of the 2d is well. Four ill.
- 3. Two cases of head-ach, and one of contusion, admitted. Seven patients.
- 9. One feverish patient from suppressed perspiration admitted. Eight ill.
- 10. No alteration of the list. Anchored at St. Thomas's, at 5 p. m. together with the Weasel.
- 11. The case of contusion of the 8th is well. Seven patients. The town is built on the leewardmost part of the island, which is not at all cleared of woods, nor the marshes drained; the consequence of which is, it is generally peopled from Portugal every second year, it proves so fatal to Europeans. They are very sickly now. The water very good, unless in the rainy season, when it is quite thick.
- 12. No alteration of the list. Plenty of goats, hogs, turkeys, fowls, yams, bananas, and limes, to be got on shore for old clothes.
- Our men employed in wooding and watering the ship, but all sleep on board. No alteration of the list. The island abounds in Guinea sparrows.

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Time.		-01	r. r.	1.00	1	· s	10.	1 4 05
ys.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Days.	Ho	Thu	Lat d. J	J E E	Z		R <sub>2</sub>	A sp
1	-						-	
Aprilis 14	8	83	St. Tho-		12			cl.
14	12 8	84 81	mas's Island.					
	0	01	Island.					
1								
-								
15	8	80			13	W *	a. m.	cl.
	12 8	79 81						
		01						
16	S	80			14	N p. m.*		cl.
	12	83				_		
1	4	84						
	8	82						
17	8	82			n	Sh 8- 1h		-1
1	12	84			р. р. m.	Sb & lb		cl.
	4	86			P			
	8	83						
18	8	82			16	SE *	• •	cl.
	12 4	83 85						
	8	82						1
19	8	83			17	<b>☆</b> m.		C.
	12	83			,			-
	4	79						
	8	S1						
1								1

- 14. One of the head-ach patients admitted the 8th is well. One with lamcness admitted. Seven sick. The tornado rose such a swell that a boat could not land on the beach to bring the men on board at night. But the gentleman, who commanded the watering party at Sierra Leon, being ashore, swam off to the boat; so much he dreaded the consequence of lying ashore again.
- 15. Three complained of head-ach, and one of sickness at stomach. Ten sick. Above fifty of the men lay ashore last night in an exceedingly damp house, in a low situation near a large swamp, an cozy beach, and a river overhung with trees and shrubs running past it; surrounded almost with very thick woods and mangroves, &c. that are constantly damp, and covered with a thick fog in the night. They made large fires in the house, and smoked. Both officers and men thought some tincture of bark, which I sent them ashore this morning, and which the captain sent them wine to take the tincture in, of very great benefit to them. A number of the Weasel's men were ashore too.
- 16. The case of contusion of the 2d, the other case of head-ach of the 8th, and the one of cold of the 11th, recovered. One with contusion admitted. Eight sick.
- 17. Two of the head-ach cases of the 15th are well. Three of the men who lay ashore admitted with bowel complaints. Nine patients. P. m. very hot.
- 18. One of yesterday's admitted cases is well. Two with slight fevers, and one with diarrhœa, admitted. Eleven sick. The men buy fowls, and other articles.
- 19. One complained of head-ach and vomiting. Twelve ill. One is a slight complaint. Some of the men were ashore during the tornado, and got wet. We got two bullocks on board for the ship's company.

f m								
Time Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aprilis 20	8 12 4 8	\$1 83 \$4 83			18	Sb & lb *		cl.
21	8 12 4 8	82 81 77 80			19	a. m. 🐞		cl.
22	8 12 8	82 83 82	00° 30″		20	V *		h.
23	8 12 8	81 79 79	00° 05″		21	a. m. 🎨 p. m. V		cl.
24	8 12 8	81 83 82	00° 04″ N	From St. Thomas's 01° 20″W	22	V *		cl.
25	8 12 4 8	82 84 85 f. 84	00° 09″	S 00° 58″W	23	V *		cl.
26	8 12 8	83 83 82	00° 14″ (	S 01° 27″W	24	V *	•	cl.
27	8 12 8	82 82 82	00° 41″	02° 10″W	25	S *		cl.
28	8 12 8	\$2 \$2 \$1	01° 12″	03° 35″W	26	S *		cl.

- 20. The oldest Sierra Leon case of remittent, the case of headach of the 15th, and the case of contusion of the 16th, are well. Nine in the list.
- 21. One of the patients of the 17th, and the slight case, are well.

  One of the gentlemen who lay ashore, was seized last night
  with cholera morbus. Eight sick. Sailed in company with
  the Weasel at 4 p. m. from St. Thomas's.
- 22. One of the slight fever patients, and the case of diarrhœa of the 18th, and yesterday's, is well. Five sick.
- 23. The other slight fever case of the 18th is well. One who went a fishing at St. Thomas's complained of feverish symptoms. Five sick. The tornados always blows from the S. E.
- 24. One of the complaints of the 17th, the head-ach of the 19th, and yesterday's complaint, are well. One complaint of lameness from a guinea worm admitted. Three ill.
- 25. Two men who lay ashore complained of fever. Five ill.
- 26. Two with nausea, and one asthmatic complaint with intermittent fever, from the Weasel, complained. Eight sick.
- 27. Two men who lay ashore with fevers admitted. The lame complaint of the 14th is well. Nine sick. Those added the 25th are very bad remittents.
- 28. One boy who lay ashore complained of fever. Ten ill.

Time.						- 1				
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.		Longi-	tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aprilis 29	8 12 8	81 82 82	01° 4	.5"	04° -	48"W	27	V *		cl.
30	8 12 8	82 82 81	02° 1	.0"	05°	52″W	28	V *	a. m.	cl.
Maii 1 Die Veneris	8 12 8	81 82 82	03° 1	12"	06°	50"W	29	V **	5 4 4	cl.
2	8 12 8	81 81 81	03° 4	45"	09°	15″W	m. p. m.	V *		cl.
3	8 12 8	81 80 81	03° 4	48"	110	36″W	1	V *		cl.
4	8 12 8	S1 81 80	04° ( R.		13°	57"W	2	SE **		cl.
5	8 12 8	81 82 f. 82	04° :	20"	16°	43″W	3	SE **	٠	cl.
6	8 12 8	SO	04°	20"	19°	37"W	-1	ESE **		cl.
7	12	80	0.1°	20"	22°	° 06″W	5	ESE *		cl.

- 29. Two men who lay ashore admitted with fevers—all those patients who lay on shore are bad remittents. Two other slight fever cases complained. Fourteen sick.
- 30. One man who lay ashore, and one other man with fever, admitted. Sixteen patients. The shorers added yesterday, and one of the other fever complaints, are remitting fevers.
  - 1. The two cases of nausea of the 26th ult. and the other complaint of the 29th, recovered. Three men who lay ashore, and one other man, complained of fever. Seventeen sick, viz. ten of bad remitting fevers, four of slight fevers, one case of asthma, or ague, one guineaworm, and one case of ulcer. Parted company with the Weasel. Ten of her men who lay ashore at St. Thomas's are ill.
  - One admitted with feverish complaints. Eighteen ill. Three
    of yesterday's entered complaints are bad tertians, and today's admitted patient was one of the boat's crew who had
    been very often wet at St. Thomas's. Cloudy at times only.
  - 3. The complaint of the 1st (he was not a shorer) recovered. Seventeen sick. Yesterday's entered complaint is a remitting fever.
  - **4.** The one added with feverish complaints the 30th is well. One entered with piles. Seventeen sick.
  - 5. The remittent admitted the 29th (not one of the shorers) died a.m. unexpectedly. He was much exposed to the sun in boats at St. Thomas's. There never was a distinct remission of his fever. One slight complaint entered. Seventeen ill.
  - One shorer entered the 25th ult. is well. Sixteen sick. Cloudy at times only.
- The Weasel's intermittent, or asthmatic complaint; one shorer entered the 27th ult.; those admitted the 1st; and the one entered the 2d, recovered. Twelve sick.

Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Maii 8	8 12 8	\$2 \$0 \$0	04° 25″	23° 43″W	6	V *		c.
9	8 12 8	\$0 \$0 \$0	04° 11″	25° 47″W	7	SE **		c.
10	8 12 8	81 81 81	03° 13″	27° 13″W	8	SE. E **		cl.
11	S   12   8	81 81 81	01° 55″	29° 04″W	9	SE **		cl.
12	S   12   8		00° 36″ 5	30° 00″W	10	V **		cl.
13	8 12 8	SI	01° 50″ N.	From St. Thomas's 30° 19″W	11	SEbS *	٠	cl.
14	8 12 8	80	02° <b>25</b> ″	30° 38″W	12	a. m. — p. m. N.		cl.
15	12	8 81 2 81 8 81	04° 08″	31° 58″W	13	V *		cl. c.
16	1:	81 2 81 8 81	04° 44′	33° 58″W	7 14	NE **	• •	cl. c.
17	1	8 81 2 81 8 81		" 35° 50″V	p. a. m	V *		cl. c.
					1	1		1 1

- The shorer entered the 25th, and one the 27th u<sup>1</sup>t, are well.
   One shorer with feverish symptoms, and one with head-ach, complained. Twelve patients.
- 9. The last case of piles is syphilis. Eleven sick.
- 10. The complaint of the 28th, the shorer of the 30th ult. and the case of head-ach of the 8th, are well. One shorer admitted with feverish symptoms. Nine sick. The shorer of the 8th is a slight remittent.
- 11. One of the shorers entered the 20th, and the case of cough of the 4th ult. are well. Seven ill. Spoke a Portuguese ship.
- The shorer admitted the 8th is well. Six patients. Cloudy at times.
- 13. One of the shorers entered the 29th ult. is well. Five sick.
- 14. The shorer admitted the 10th recovered. A coxswain, who was often wet in the boat at St. Thomas's, entered with feverish symptoms. Five sick.
- Two of the shorers entered the 1st, and yesterday's entered complaint, are well. One complained of nausea. Three ill. Cloudy at times.
- 16. Yesterday's admitted complaint is well. Two patients.
- 17. Two of the recovered shorers complained of intermittents.

  One with cough, and one with feverish symptoms, admitted, Six ill.

Time.	. 1	÷ .1	de	<u>.</u>		í o		vi	5 .	1
Days	Flours	Thermo meter.	Latitude	d.p.orr.	Longi	tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Armo- sphere.
Maii 18	8 12 8	S1 S0 S0	07°	12"	38° (	08"W	16	NE **	×	cl. c.
19	8 12 8	\$0 80 80	os°	38"	40°	22″W	17	NE **	**	cl. c.
20	S 12 S	79 79 80	10°	01"	42°	46″W	18	NE **	1941 1987	cl. c.
21	8 12 8	79 80 79	11°	19"	45°	06″W	19	NE **		c. cl.
22	8 12 8	78	12°	08"	47°	00″W	20	NE **	364	c. cl.
23	8 12 8	78	12°	59"	45°	59″W	21	NE **	]###(	c. cl.
24	8 12 8		13°	05"	50°	51"W	22	V **	38	c. cl.
25	S   12   S	80	13°	17"	52°	45″W	23	Ely **	*	c. cl.
26	S   12   8	so	13°	17"	55°	os"W	2.4	Е	×	c. cl.
27	S   12   S		15°	07"	57°	45"W	25	E NWbW **		c. cl.
28	S   12   8	51	16°	26"	60°	29″W	26	ENE S ***		c. cl.

- 18. No alteration of the list. Heavy dews.
- 19. The feverish complaint entered the 17th is an intermittent. Six patients. Cloudy at times.
- 20. The Weasel's man relapsed. One with cough complained. Eight sick.
- 21. No alteration of the list,
- 22. Eight sick. Very cold air.
- 23. The cough case entered the 20th is well. One of the shorers who recovered of his remittent, seized with intermittent fever. Eight patients.
- 24. No alteration of the sick. Very little dew.
- 25. The man with ulcer of the 24th ult. does duty. Seven sick.
- 26. No alteration of the list. The air now agreeably hot.
- 27. The patients with intermittents recover slowly.
- 28. Seven patients.

Time.	ırs	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Days.	Hours	The	Lati d. p	Lo tud	M	W	Rai	Spl
Maii	5	81	16° 46″		27	V **		c. cl.
29	12 8	S1 S1	Antigua.					
30	8 12	80			28	ENE*		c. cl.
	8	81						
31	S   12	81 83			29	SE *		c.
	s	82						
Junii 1 Die	8				m.	SE *		c.
Lunæ.	4	84			a. m.			
	S	S3						
2	8				2	SE *		c.
	12					4		
3	- 8	82			3	SE *	-	с.
	12							. 1
4	-	so	St. Chris-		4	EbS **	-	
	12		topher.		4	EDO		c.
	-		-		-			
5	1:				5	E **		c.
		8 82						
6		8 81 2 83	17° 17″		6	E **	a. m	c. cl.
		8 82					1	
						1		
1	i		1	1	1		1	1

- 29. No alteration of the sick. At six p. m. anchored in English harbour, Antigua; it is very small, and surrounded with high hills, which keep the sea breeze off, and render it very unhealthy.
- 30. Seven in the list. Admiral Mann commands here; five of his Majesty's ships are in the harbour.
- 31. Sent one case of syphilis, and one with a very foul ulcer, who came from a Guineaman, to the hospital. The Weasel's man returned to duty. Six sick.
  - One of the men was killed p. m. by a fall from the main-top-mast head upon the quarter-deck. He breathed only a few minutes. No wound appeared about his head; but his left leg was broke in two parts, of which one of the fractures was compound. The men drink new rum immoderately. Six patients. Four cases of intermittent fever, one case of guinea worm, and one of cough.
  - 2. A feverish complaint entered. Seven ill. The thermometer ashore at the hospital was 87 at 2 p, m.
  - Two of the intermittent cases are well. One with feverish symptoms, and one with contusion, admitted. Seven ill-Sailed at 4 p. m.
  - 4. One of the intermittent cases is well; and one with contusion entered. At nine a.m. anchored in Bassaterre road, and p. m. dropped down to Old road.
  - Two lame patients, and one feverish complaint, admitted.
     Ten ill. Employed watering the ship. The water is very good.
  - 6. The guinea worm and intermittent cases are well. The intermittent returned to duty the 4th, complains of head-ach from washing. Two from drinking admitted with feverish symptoms. One of them was St. Thomas's remittent, and one contusion. Twelve patients. Sailed at 6 a. m.

Time		è .	r, c,	1	1 .	1 8	15.	1 1 0
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Junii 7	8 12 8	83 81 81	17° 18″	From St. Christo- pher's 02° 28″W	7	EbN *	•	cl.
8	8 12 8	83 81 81	17° 22″	04° 27″W	8	EbN E *	•	c. cl.
9	8 12 8	85 83 82	17° 32″	06° 57″W	9	EbS**	• • •	cl.
10	8 12 8	82 83 82	17° 24″	08° 48″W	10	f SE t NE *	• • •	c.
11	8 12 8	83 \$3 82	17° 59″ Hispanio- la.		11	E*		c.
12	8 12 8	84 83 82	18° 14″		12	f EbS t SEbE		C.
13	8 12 8		P. m. Port Royal, Ja- maica.		13	V		c.
14	8 12 8	83 85 82			14	Sb & lb		C.
15	8 12 8	83 84 83			a. m. p.	Sb & lb		
-		1						

- The one added with feverish symptoms the 3d is well. Eleven sick.
- The complaint of the 2d, and the two feverish ones entered the 6th, are well. Eight sick.
- One with contusion admitted. Nine ill. The thermometer being highest in the morning is owing to the sun shining in at the cabin windows, though not upon it.
- 10. The contusion case of the 6th is well The Weasel's man relapsed again; and one with feverish symptoms entered. Ten sick.
- 11. Two lame complaints admitted the 5th are well. Eight in the list. The feverish complaint added yesterday is a remitting fever; he was ailing once before, and was one of the shorers at St. Thomas's.
- 12. The feverish complaint entered the 5th is well. Seven sick.
- 13. The intermittent man, who was returned to duty the 6th, relapsed; and three with diarrhœa entered. The contusion case of the 9th is well. Ten in the list. At three p m. anchored. Sir George Rodney commands here. Four sail of the line, besides frigates and sloops.
- 14. The tertian case admitted the 10th is well; and an ulcer complaint entered. Ten ill. The ships are allowed fresh meat once a week.
- 15. Sent the two intermittent cases, the Weasel's man (and one case of ulcer and one of gout, neither of whom was in the list,) to the hospital. Seven sick.' The men drink immoderately of new rum.

Time.		-01	de,	.i. 0	-:	ls.	or	- 0 - e
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Fain	Atmo-sphere.
Junii 16	S 12 8	83 84 83		*	16	Sb & lb		c.
17	S 12 8	83 84 83			17	Sb & lb	p. m.	c. cl.
18	8 12 8	83 85 85			18	Sb & lb		c.
19	8 12 4 8	\$2 \$5 \$6 \$4			19	Sb & lb		C.
20	8 12 4 8	83 85 86 85			20	Sb & lb		c.
21	8 12 8	83 85 85		*	21	Sb & lb		c.
22	8 12 8	84 86 85			22	Sb & lb		c.
23	8 12 4 8	83 86 87 85			23	Sb & lb	•	c. cl.
24	8 12 8	84 86 85			24	Sb & lb		c. cl.

- 16. The case of contusion of the 3d, and one of the diarrhox of the 13th, are well. One with rheumatism admitted. Six ill. The sea breeze blows so regularly here in the day, that it is called the Doctor, from its being so refreshing; but the land breeze is unhealthy. The situation of Port Royal for receiving the whole benefit of the former, and being well out of the reach of the latter, renders it remarkably healthy.
- 17. The case of contusion of the 3d, and one of the diarrhoa men of the 13th, are well. One complaint of lumbago admitted. Five ill.
- 18. No alteration of the sick.
- 19. One bowel complaint admitted. Six ill.
- 20. The man with rheumatism, and one with erysipelas, sent to the hospital. One case of contusion, and one with feverish symptoms, entered. Seven ill.
- 21. One man with contusion, and one with intemperance, admitted. Nine sick.
- 22. The lumbago complaint of the 17th, the one with contusion of the 20th, and yesterday's case of intemperance, are recovered. One with feverish symptoms added to the list. Seven in it.
- 23. The feverish complaint of the 20th, the one with contusion of the 21st, and a slight complaint, are well. Four ill. A very hot day.
- 24. One with feverish symptoms admitted. Five sick.

Time.				1	1	1		
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Junii 25	8 12 4 8	83 85 86 84			25	Sb & lb		c. cl.
26	12 8	82 85 84			26	Sb & lb		c. cl.
27	8 12 4 8	82 84 85 84			27	Sb & lb		c. cl.
28	8 12 8	\$2 \$5 \$4			28	Sb & lb		cl. c.
29	8 12 8	80 85 84			29	Sb & lb		cl. c.
30	8 12 8	82 84 83	1		m. p. m.	Sb & lb		c. cl.
Julii 1 Die Mercu- rii.	- 8 12 8	82 85 83			1	Sb & lb		c. cl.
2	8 12 4 8	83 \$5 \$6 84			2	Sb & lb		c.
3	12 8	83 85 82			3	Sb & lb		c.
		}	a approximation	- 5	,			

- 25. One case of diarrhœa entered. Six patients.
- 26. The feverish complaint of the 22d is well. Five sick.
- 27. The case of old cough of the 4th April, and the other case of diarrhœa of the 13th, recovered. One man with contusion, and one with cold, from sleeping on deck, entered. Five patients.
- 28. The bowel complaint of the 19th, and one with purging of the 25th, recovered. One case of head-ach, and one of inflammation, complained. Five ill.
- 29. The feverish complaint of the 24th, and the man with cold of the 27th, are well. Three sick.
- 30. One case of diarrhœa—the feverish complaint returned yester-day to duty—and one man with wound admitted. Five ill: viz. one case of head-ach, one of inflammation, one of wound, one of contusion, and one griped patient.
  - One with feverish symptoms, and one with inflamed leg, entered. Seven ill.
  - 2. The case of diarrhea, and the one of wound of the 30th ult. are well. One case of contusion entered. Six ill.
  - The man with contusion of the 27th, the one with inflammation of the 28th, and the feverish complaint of the 1st, are well. Three sick.

Time.	1	,	2.					
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 4	8 12 8	82 84 82			4	Sb & lb		с.
5	8 12 8	82 84 83	•		5	Sb & lb		с.
6	8 12 8	\$2 \$3 82	17° 36″		6	ESE **		C.
7	8 12 8	82 83 82	17° 42″		7	ESE **	• •	cl.
8	8 12 8	82 83 82	17° 58″ • R.		8	V ESE *	• •	cl.
9	8 12 8	83 83 82	18° 05″		9	V **		c. cl.
10	8 12 4 8	\$2 \$4 \$5 82	15° 10″		10	V *		c. cl.
11	8 12 8	83 84 83	18° 45″		11	V *	p. m.	cl.
12	8 12 4 8	\$2 83 85 83	19° 47″		12	V **		c. cl.
13	8 12 8	83 84 83	20° 00″		13	V **		c. cl.

- 4. All the seven complaints I sent to the hospital are come on board; and five of them entered patients. Eight ill.
- 5. No alteration of the list.
- 6. Two with feverish symptoms complained. Ten sick, besides a number with ulcers. Five a. m. sailed in company with his Majesty's ship Boyne, and Hawk schooner.
- 7. The hospital case of ulcer, and gout, is well. Two feverish complaints, and one of guinea worm, admitted. Eleven sick. Some of the complaints, returned from the hospital, worse than when they were sent.
- 8. Two bilious patients entered. Thirteen ill. The feverish complaint added the 6th is a bad remittent.
- 9. The case of inflammation of the 1st does duty. Twelve sick.
- 10. An hæmoptic patient admitted. Thirteen sick.
- 11. One of the feverish complaints of the 6th, and one of the 7th, are well. Eleven ill.
- 12. The head-ach patient admitted the 28th ult. and the two bilious complaints of the 8th, are well. Eight sick. Parted company with the Boyne, and lost sight of the Hawk.
- 13. No alteration of the list.

Time.		ė .l	, c	150	. (	rô.	12	d ai
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 14	8 12 8	\$2 \$3 \$3	20° 04″		p. p. m.	VE*		c. cl.
15	8 12 8	83 83 82	21° 14″		15	ESE *		c. cl.
16	8 12 8	\$2 83 \$2	23° 34″	From the Gr. Caieos 00° 41″ E	16	ESE EbS **		cl.
17	8 12 8	82 83 83	24° 58″	01° 22″ E	17	f ESE t ENE *		cl.
18	8 12 8	52 83 82	25° 25″	01° 36′ E	18	f ESE t NE *	a. m.	cl.
19	8 12 8	82 84 82	26° 44″	02° 10″ E	19	V *	p. m.	cl.
20	8 12 4 8	83 85	27° 40″	02° 58″ F	20	V *		cl.
21	8 12 8	84	27° 51″	03° 21″ F	21	V *		cl.
22	12	83	28° 12″	03° 51″ F	22	V*		cl.
23	12	83	29° 02″	05° 12″ I	23	SSW *		c.
24	12		29° 42″	06° 23″ I	24	SSW *		c.

- 14. The other complaint of the 7th, and the one with guinea worm, are well. Six sick.
- 15. No alteration of the patients. Six p. m. took our departure from the Great Caicos.
- 16 Six in the list.
- 17. No alteration of the list.
- 18. An inflammation case admitted. Seven ill.
- 19. The remittent case of the 6th is well. Six patients.
- 20. No alteration of the list. Scarce any wind.
- 21. Six in the list. Very hot, and scarce any wind.
- 22. One case of rheumatism, and one with diarrhoa, entered, Eight ill. The same weather.
- 23. No alteration of the list.
- 24. Eight of the list.

Time	. ,	6 .	r.	1 . 2 6	1 .	1 .:	] =	1
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 25	8 12 8	83 83 83	29° 58	07° 12″ E	25	*		с.
26	8 12 8	82 83 82	30° 43	07° 42″ E	26	SE *		c.
27	8 12 8	82 82 81	32° 08	09° 00″ E	27	SE *		c.
28	8 12 8	82 82 82	33° 14	09° 52″ E	28	SE *		c.
29	8 12 8	82 82 82	33° 30′	09° 52″ E	29	SE *		c.
30	8 12 8	81 81 81	34° 07	10° 32″ E	m. a. m.	SE *		c.
31	8 12 8	\$0 81 \$0	34° 58	11° 37″ E	2	SE —		c,
Aug. 1 Die Saturni	8 12 8	\$0 \$0 80	36° 07	13° 44″ E from Gr. Caieos		SSW *		cl.
2	8 12 8	so 80 79	37° 20	16° 43″ E	4	f SWbS t NW **		cl.
3	8 12 8	77 76 76	37° 48	16° 57″ E	5	NNE *		cl. c.
4	8 12 8	74 75 75	37° 20	20° 51″ E	6	f NE t ENE *		cl. c.

- 25. No alteration of the list. Little or no wind, and very hot.
- 26. Eight patients.
- 27. No alteration of the list.
- 28. The old hospital intermittent ease, and the Weasel's man, recovered. One patient with cough admitted. Seven ill.
- 29. No alteration of the list.
- The patient entered with cold the 28th, recovered. Six patients.
- 31. The case of inflammation of the 8th is well. Five sick; viz. one of erysipelas, one of contusion, one of hæmoptoe, one of rheumatism, and one of diarrhæa.
  - 1. One feverish complaint entered. Six ill.
  - The case of hæmoptoe died. One patient with cough adde to the list. Six ill.
  - 3. The yesterday's admitted cough does duty. Five ill.
  - 4. The feverish complaint of the 1st is a bad remittent fever.

    No alteration of the list.

Time.		<u>-</u>	e,	i	.1	é o	1		·S.	- o	6 0
Days.	[]ours	Thermo-	Latitude,	d. p. or r.	Long	tude in, m. or o.		Moon.	Winds.	Rain or Dew.	Atmo-
Aug.	8 12 8	74 74 75	37°	46"	21°	11"	Е	7	f ESE t ENE *		cl. c.
6	8 12 8	73 75 75	38°	32"	21°	24"	Е	8	ESE **	-	cl. c,
7	8 12 8	75 76 75	39°	11"	21°	33"	Е	. 9	a. m. — p.m. NW *		cl. e.
8	8 12 8	76 77 76	40°	03"	22°	35"	Е	10	f NW t NWbN *		cl. c
9	8 12 4 8	76 76 78 76	40°	20"	23°	18"	Е	11	f SbE t WSW		c. cl.
10	8 12 4 8	74 75 77 76	41°	00"	26°	12"	E	12	f SbE t WSW p. m. **		c. cl.
11	8 12 8	75	41°	44"	29°	21"	E	13	SW **		cl.
12	8 12 8	71	42°	14"	32°	47"	E	14	NW **		cl.
13	8 12 8	70	42°	24"	35°	05"	E		a.m.NW pm WSW **		cl. c.
14	12	73	43°	09"	38°	10"	E	16	f SWbW t WNW **		cl.

- 5. The case of contusion of the 2d ult. is well. Four sick.
- 6. One with furuncle entered. Five ill.
- 7. No alteration of the list.
- 8. Five sick.
- 9. No alteration of the list.
- 10. The one with furnucle of the 6th is well. Two with feverish symptoms admitted. Six ill.
- 11. The case of erysipelas, and the one of diarrhoa of the 22d, are well. One feverish complaint, and one with contusion, admitted. Six patients.
- 12. Yesterday's case of contusion is well. Five in the list.
- 13. The case of remitting fever died. Four sick.
- 14. Two with feverish symptoms, entered the 10th, are well. One feverish complaint, and one with cough, admitted. Four ill.

Time	. 1	1	و ک	1 . 2 . 1	. 1		ь 1	1 .:
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aug. 15	8 12 4 8	68 69 71 69	43° 41″	40° 17″ E	17	NbE ENE *		cl. c.
16	S 12 8	68 68 68	43° 46″	42° 37″ E	18	NbE ENE *		c. cl.
17	8 12 8	68 68 70	43° 37″	44° 21″ E	19	NbE ENE **		c. cl.
18	8 12 4 8	69 67 72 71	43° 43″	45°15″ E	20	fWNW t NW **		cl.
19	S  12   8	69	45° 01″	47° 54″	21	WNW NE ***		cl.
20	8 12 8	64	45° 18″	49° 20″ E	22	f NbE t NW **		cl.
21	8 12 8	63	46° 40″	51° 35″ E	23	NW ***		c. cl.
22	8 12 8	60	45° 48″	54° 33″ E	24	f W t WSW ****		cl.
23	8 12 4 8	59	49° 35″	60° 09″ E	25	f NW t WSW ***	• •	cl.
`24	8 12 4 8	62 65	49° 34″	From the Great Caieos 64° 51" E		f WSW t WNW ***		cl.

- 15. One with feverish symptoms entered. Five sick.
- 16. Yesterday's, and the feverish complaint of the 11th, are well. One with feverish symptoms entered. Four ill.
- 17. The complaints admitted the 14th, and yesterday's, are well.

  One case of head-ach, and one of rheumatism, entered.

  Three patients.
- Two with feverish symptoms, and one with contusion, admitted. Six sick.
- The man with rheumatism entered the 17th is well. One with inflammation admitted. Six ill.
- 20. No alteration of the list.
- 21. One of the feverish complaints of the 18th is well. Five patients.
- 22. One with feverish symptoms admitted. Six ill.
- 23. The man with head-ach of the 17th, the one with contusion of the 18th, and the one with inflammation of the 19th, are well. One with head-ach entered. Four ill.
- 24. The feverish complaint of the 22d, and yesterday's admitted head-ach, are well. Two sick.

Time Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aug. 25	8 12 8	61 64 62	49° 57″ Lizzard.		27	f WSW t NW***	-	cl.
26	S 12 8	61	M Spithead.	-	28	f WSW t NW **		c.

- 25. No alteration of the list. A. m. made the Lizzard.
- 26. The other feverish complaint of the 8th is well. The only patient in the list is a case of rheumatism, an old man, who likewise has suffusion in one of his eyes, and is to be sent to the hospital with the ulcer complaints. Anchored at noon at Spithead.

END OF THE FIRST VOYAGE.

# CHAPTER II.

The Diary of the Weather, from the 30th of November 1772, until the 24th of August 1773.

Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Nov.30 Die Lunæ.			Cowes.		6	E S **	• •	h. cl.
Dec.					7	SSW **		h. cl.
2		58 65 f			8	f SE t ESE **		cl.
3	12	61 f 65 f 65 f	Off Ply- mouth.		9	f ENE t SE **		h.
4	12	61 f 62 f 67 f	48° 33″ R.	From the RamHead 02° 11″W	10	SE ***		h.
5	12	62 f 64 f 67 f	47° 05″	05° 04″W	11	f E t ESE **		h.
6	12	60 f 60 f 67 f	47° 50″	06° 26″W	12	W NW **		cl.
7	8	55	44° 28″	07° 57″W	13	f NNW t NE **		cl.
8	12	61 f 61 f 65 f	41° 52″	09° 51″W	14	f NNW t NE **		c. cl.
9	8 12 8	64	39° 26″	10° 50″W	15	NE **		c.
10	8 12 8	67	37° 14″	11° 08″W	16 p. p. m.	NNE **		c.

- 30. Seven men in the sick list. Three with feverish symptoms, one case of old intermittent, one with fractured clavicle, one of scald, and one of contusion. M. Sailed from Spithead, and anchored at Cowes at 2 p. m.
- 1. One case of cough, one of wound, and one of contusion, complained. Ten sick.
- Yesterday's case of cough does duty. Nine ill. All the complaints have proceeded from intemperance.
- One of the slight fevers of the 30th is well; and one case of quinsy admitted. Nine sick. His Majesty's sloop Dispatch joined us company p. m.
- One man with fever, one with cough, and one with ulcer, admitted. Twelve patients.
- The case of contusion of the 1st, and the one of quinsy of the 3d, are well. Three with feverish complaints entered. Thirteen ill.
- 6. The case of contusion of the 30th, two of yesterday's complaints, and another slight fever, recovered. Nine sick. The fever patient of the 4th is a remittent.
- 7. The other slight fever of the 30th ult. is well. Eight sick.
- 8. The case of cough of the 4th is well. Seven ill.
- 9. No alteration of the list.
- The man with wound of the 1st, and the one with ulcer of the 4th, are well. Five sick.

Time		0.	de r.	0.0		v <sup>*</sup>	10	1 0
Days.	Hour	Thermo- meter.	Latitude d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew	Atmo-sphere.
Dec.	8 12 8	64 67 69	35° 20″	11° 20″W	17	f NNE t NE *		cl.
12	8 12 8	66	33° 34″	11° 40″W	18	f NNE t ENE **		əl.
13	12	64 f 66 f 70 f	Madeira.	in 17° 20″W Porto Sancto.	19	NE *		cl.
14	12	67 f 70 f 68 f		Madeira in 18° 11″W	20	Sb & lb		c.
15	12	66 f 68 f 67	32° 52″		21	f ENE t EbS**		C.
16	12	66 f 69 f 71 f	30° 25″		22	f ENE t EbS,**	4 1810	c.
17	12	67 f 69 f 72 f	28° 47″	From Madeira 00° 45″ E	23	f ENE t EbS *		c.
18	12	71 f 72 f 69 f	Teneriffe.		24	f ENE t EbS *		с.
19	8 12 8	69			25	Sb & lb		c.
20	8 12 8	71			26	Sb & lb **		c.
1					1		. 1	1

- 11. One lame patient, and one with feverish symptoms, admitted. Seven ill.
- 12. No alteration of the list.
- 13. The complaints of the 11th discharged. Five sick. Five p. m. anchored with the Dispatch in Foncheall Bay.
- 14. The case of scald, the one of old intermittent, and the fractured clavicle man of the 30th ult. recovered. Two ill.
- 15. A man with swelled parotid admitted. Three sick. Sailed with the Dispatch at eleven a. m.
- 16. No alteration of the list.
- 17. One case of cough, one of sore throat, one of sickness at stomach, and one with eruptions, entered. Seven ill. Began serving spruce beer to the ship's company. Teneriffe.
- 18. The case of sickness at stomach admitted yesterday is well.

  One man with cold, from suppressed perspiration, admitted.

  Seven ill. Nine a. m. anchored in St. Cruze Road.
- 19. The case of cough of the 17th is well. Six patients.
- 20. No alteration of the list. His Majesty's transport Endeavour came in; she had two lieutenants, &c. on board.

Time.		6 .1	۲.5		.	, , , , , , , , , , , , , , , , , , ,	1 10	ا نه ا
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Dec. 21	8 12 8	70 71 71			27	Sb & lb *		с.
22	S 12 8	69 70 69			28	Sb & lb *		c.`
23	8 12 8	68 70 69			29	Sb & lb *		c.
24	S 12 8	71 70 70			m. a. m.	Sb & lb *		c.
25	8 12 8	70 68 70	28° 05″		2	NE *		c.
26	8 12 8	70 70 69	26° 05″	00° 05″W from the Pick.	3	f E t ESE **		c. cl.
27	8 12 8	67 67 67	23° 05″	00° 16″W	4	E *		c.
28	8 12 8	65 65 71 f	20° 46″ Cape Blancho.	00° 15″W	5	f E t NNE *	×	c. cl.
29	8 12 8	68 68 69	19° 05″	00° 07″W	6	f ENE t ESE *	×	c. cl.
30	8 12 8	68 69 68	18° 05″	00° 43″ E	7	NE *	×	c. cl.
31	S  12  8	68	16° 34″	00° 38″ E	8	NE *	*	a. m. h.

- 21. The remittent of the 4th, and one of the feverish complaints of the 5th, are well. Four sick.
- 22. The complaint with eruptions of the 17th, and the one with cold of the 18th, are well. Two sick. On the tops of the mountains there is frost in the night.
- 23. No alteration of the list.
- 24. Two patients.
- 25. Sailed with the Dispatch, and Endeavour, at one a. m.
- 26. No alteration of the list. The Endeavour parted company in the night.
- 27. One entered with sickness at stomach. Three sick.
- 28. No alteration of the list. Off the coast of Barbary.
- 29. The complaint of the 27th is well. Two ill.
- 30. The parotid case of the 15th is well. One with guinea worm, who lately came from a Guinea ship, complained. Two sick.
- 31. No alteration of the list. At five p.m. anchored off Senegal Fort with the Dispatch. A very great surf on the beach.

VOL. I.

Time.		· . l	C, I.	, é o	.	, <u>.</u>	<u> </u>	
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Jan. 1 Die Veneris	8 12 8	69 69 71	Senegal.		9	NE **		h.
2	8 12 8	70 71 72			10	NE*		c.
3	8 12 8	71 71 71			11	NE *	**	h. p. m.
4	8 12 8	72 72 72			12	NE *	×	h.
5	8 12 8	73 72 73	15° 29″	From Senegal Fort	13	NbE *	×	cl.
6	8 12 8	73 73 73	15° 26″	02° 37″W	1-1	NbE *	140	cl.
7	S   12   S	1 .	15° 26″	04° 26″W	15	NbE **		cl.
8	8128	73	15° 05″		р. р. т.	NNE **		c.
9	8 12	73	Maijo.		17	NNE **		c.
10	12				18	NNE*		cl.

- 1. Two lame complaints entered. Four patients. The garrison has been very sickly, and lost a number of men, as we learned from a canoe that came off.
- One case of sore throat, one complaint of guinea worm, and yesterday's complaints, in the list. The Dispatch dropped down, and anchored off the bar.
- One case of abscess, and one lame complaint, admitted. Six ill. No boat can land yet.
- 4. The two lame, and yesterday's complaints, are well. Two ill. P. m. joined the Dispatch, and sailed together.
- 5. One sore throat patient admitted. Three sick.
- 6. No alteration of the list.
- 7. The sore throat complaint of the 5th is well. Two patients.
- 8. No alteration of the list. A gouty complaint not in the list. At one p. m. anchored at Maijo, one of the Cape de Verde islands; it is very barren and hilly. The inhabitants are all black, and employed in making salt; and the little stock which they have, chiefly comes from St. Jago, the most fertile of these islands.
- 9. Two patients.
- Two with feverish complaints entered. Four ill. Got a few lean bullocks for the ship's company. They have bought some goats, hogs, &c.

Time			0) 0	2 . 1			1	
Days.	Hours	Thermo meter.	Latitude d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Jan.	8 12 8	72 72 73	St. Jago.		19	NNE		cl.
12	8 12 8	72 73 73			20	NNE **		c. cl.
13	8 12 8	72 73 73	13° 48″	From Praija Bay 01° 45″ E	21	NE **	<b>**</b>	cl.
1-4	8 12 8	73 74 74	12° 15″	03° 43″ E	22	NE **	345	cl.
15	8 12 8	75 74 74	11° 00″	05° 45″ E	23	NE *	×	cl.
16	S 12 8	74 76 78	10° 10″	06° 47″ E	24	*	**	h.
17	S   12   S		09° 33″	07° 13″ E	25		*	h.
18	8 12 4 8	79		07° 27″ E	26	*	×	c.
19	12 4 8	81 82	09° 12″	os° 10″ E	27	N*		h.
20	12 4	81 H 83	08° 43″	09° 19″ F	28	N NE *	*	h.

- One of yesterday's complaints is well. Three sick Sailed at four a. in. and anchored at eight a. m. with the Dispatch, in Praija Bay, St. Jago.
- No alteration of the list. Sailed with the Dispatch at five p. m. We got very little stock.
- 13. No alteration of the list.
- 14. Three patients. A number of bilious complaints on board the Dispatch.
- 15. One of the feverish complaints of the 10th is well. One with strain admitted. Three sick. After consulting the Captain, I made a quarter cask of wine into a tincture of bark.
- 16. Yesterday's admitted complaint does duty. Two in the list.
- 17. No alteration of the list. Very sultry.
- 18. The case of guinea worm of the 24th ult. is well. One patient. Very hot. In ten minutes the thermometer rose in the sun's rays 24 degrees.
- 19. No alteration of the list. Very hazy, notwithstanding the sun shines.
- One case of sickness at stomach admitted. Two patients. P. m. anchored off Sierra Leon river with the Dispatch. Very hot.

Time.	1 6 .1			1 1		in I	
Days.	Hours Thermo-	Latitude, d. p. or r.	L gi- tude m, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Jan. 21	\$ 82 12 \$1 8 \$1	Sierra Leon.		29	lb	34	h.
22	8 79 12 80 4 82 8 81			n. p. m.	sb & lb	7.0	h.
23	8 80 12 81 8 81			1	Sb & lb		h.
24	\$ 79 12 80 \$ 81			2	Sb & lb	7407 7674	h.
25	S SO 12 SO 8 S1	,		3	Sb & lb	×	h.
26	8 50 12 81 8 81	,		4	Sb & lb	**************************************	h.
27	8 80 12 81 8 81			5	Sb & lb	*	h.
28	\$ 78 12 80 4 82 8 81			6	Sb & lb	**	h.
29	8 79 12 50 4 52 5 51			7	Sb & lb	×	h.

- 21. Yesterday's complaint is well. One fever patient complained.

  At three p. m. anchored in Sieria Leon river. Some merchant ships, whose men have been very sickly, lying here.
- 22. No alteration of the list. Gave five ounces of the wine tincture of bark to every man before they were sent ashore in the morning on duty; and they were strictly forbiden to have any communication with the merchantmen's people. The same caution and preventive were observed on board of the Dispatch, by my recommendation.
- One inflammation complaint entered. Three iil. Gave the tincture of bark to the shorers. They all sleep on board.
- 24. The guinea worm complaint, discharged the 18th, relapsed.

  One case of ophthalmia; and two with feverish symptoms admitted. Seven sick. No shore duty, being Sunday.
- 25. No alteration of the list. Gave the tincture of bark to the shorers. An old man came on board, whom we left here, last year, on board of a ship.
- 26. One of the feverish complaints of the 24th is well. Six sick.

  Gave the shorers the fincture of bark.
- 27. One admitted from intemperance. Seven ill. The men get New England rum from the blacks. Administered the tincture as usual.
- 28. The other feverish complaint of the 24th is well. One bilious and one lame complaint admitted Eight patients. Gave the tincture to the shorers—the wooding and watering parties—and boat's crews.
- 29. The ophthalmia case of the 24th, and yesterday's bilious complaint, are well. One case of contusion entered. Repeated the tincture of bark,

	Time.	- sul	Fliermo- meter.	Latitude,	:	Longi-	cr o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
	Days.	Hours	The	Lati		Log	i i	Me		Ra	At Spl
	Jan. 30	8 12 8	79 81 81					8	Sb & lb	*	h.
	31	8 12 8	81 81 81					9	f NNW t NW	**	h.
	eb. 1 Die Lunæ	8 12 4 8	81 81 82 81	os°	15"			10	f NNW t NW *		h.
	2	S 12 4 8	81 81 82 81	07°	40"	Sic	Cape erra eon 35"W	11	V *	*	h.
	3	8 12 8	80 75 79	07°	13"	00°	15″W	12	V *		h. cl.
	4	8 12 8	80 79 79	C6°	51"	00°	os" E	13	p. m. 🐇		h. cl.
	5	8	79	05°	40"	010	12″ E	14	N*	- 38	h. cl.
	6	8 12 8	SO	05°	46"	000	48" E	15	V*	- 386	h. cl.
	7	8   12   8	79	04°	26"	01°	18" E	p. a. m	V *	×	h. cl.
,	8	8	79	04°	56"	01°	57" E	17	V *-	1	h.

- 30. One with inflammation complained. Eight sick. Shore duty over. Four ounces of the tincture was the dose given on board of the Dispatch.
- 31. The intemperance complaint of the 27th, the lame man of the 28th, and the one with contusion of the 29th, are well.

  Two with sickness at stomach, and one case of abscess, admitted.
  - 1. Yesterday's sickness at stomach complaint is well. One bowel case admitted—these complaints proceed from eating uniperplantains, bananas, and fish—and one of contusion. Eight sick; viz. two cases of inflammation, one with gripes, one reunttent complaint, one of sore throat, and three lame complaints.
  - No alteration of the list. The Dispatch's men are still afflicted with bilious complaints.
  - 3. The guinea worm complaint of the 24th ult. and the contusion case of the 1st, are well. Six patients.
  - 4. The fever patient, the case of inflammation of the 30th ult.

    and the griped complaint of the 1st, are well. Three patients.
  - 5. The abscess case of the 31st ult. is well. Two sick. No person on board finds himself refreshed from sleep.
  - 6. No alteration of the list. Very dull weather, which depresses every one's spirits. Ten men in the Dispatch's sick list.
  - Two patients only. The same kind of weather yet; and no person is refreshed from his sleep.
  - 8. One with eruptions admitted. Three sick. Every thing amazingly damp and mouldy on board. Wood work opens at the joints, and shrinks greatly; and iron rusts.

				3				
Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- rude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb.	8 12 8	78 80 81	04° 30″	02° 37″ E	18	V *	×	h.
10	8 12 8	79 80 79	04° 16″	from Cape Palmas 00° 33″ E	19	V *	,\(\alpha\)	h.
11	8 12 8	76 70 76	04° 32″	01° 40″ E	20	V **	×	h. cl.
12	S   12   4   8	76 76 80 79	05° 03″	03° 09″ E	21	N *	36	h. cl.
13	8 12 4 8	78 79 82 80	05° 16″	from Cape Le Hou 00° 58″ E	22	N*	788	h. cl.
14	8 12 4 8	80 80 82 80	04° 05″ Appalonia		23	N.**	2007	cl.
15	8 12 8	\$1 \$0 \$0	Axim		24	V *	<b>186</b>	cl. c.
16	8 12 8	\$1 \$1 \$1			25	Sb & lb		cl. c.
17	8 12 8	. 80	O5° C0″ Cape Coast.		26	Sb & lb	**	cl. c.
l.			1	1		1.	1	

- One who was ashore fishing at Sierra Leon, admitted with feveral symptoms. Four ill. The fishermen were not allowed the fineture of bark.
- 10. One inflammation case entered. Five patients.
- 11. No alteration of the list. Very cold and disagreeable weather.
- 12. The complaint of the 9th is well. Four sick. Our sails are quite black with mildew. The dews are very heavy.
- 13. No alteration of the list. Lost sight of the Dispatch.
- 14. The inflammation complaint of the 10th is well. Three ill.

  The Dispatch in sight. Anchored m. at Appalonia; sailed at 4 p. m. and anchored at eight p. m. in the offing.
- 15. The complaint of the 8th is well. One case of rheumatism complained. Three sick. Sailed at eight a.m. and anchored at one p.m. at Axim, a Dutch settlement, with an intention to water the ship; but they have none, it is so long since they had rain. The Dispatch out of sight.
- 16. No alteration of the list. The Dispatch joined, and left us again. Ten in their sick list.
- 17. Three patients yet. At four p. m. anchored at Cape Coast.

				0				
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longitude in, m. or o.	Moon.	Winds.	R. in or Dew.	A mo-
Feb. 18	8 12 8	\$0 82 \$2			27	**		ci.
19	S 12 S	79 80 80			28	*	*	cl.
20	8 12 8	78 81 80			29	Sb & lb	. joj	cl.
21	8 12 8	78 81 50			m.	Sb & lb	)Ø(	cl.
22	-   8   12   4   8	80 81 82 81			2	Sb & lb		cl. c.
23	8 12 8				3	Sb & lb	**	cl. c.
24	8 12 8	80 82 79			4	p. m. 💸		cl.
25	8 12 8	79 80 81	04° 55″		5	Sb & lb		h.
26	8 12 4 8	81 83	04° 40″		6	Sb & lb		h.
1	,		1	ł		1	1	1

- 18. No alteration of the list. The Dispatch joined us; none of their people dangerously ill.
- 19. The inflammation case of the 23d ult. is well. Two patients. The men can get no fresh stock, fruit or vegetables, to buy.
- 20. One with feverish symptoms admitted. Three sick. The waterers here, and boat's crew, take the tincture of bark. It is pond water we get.
- 21. No alteration of the list. Gave the waterers the tincture.

  The water has no bad taste, though it is thick. It is well strained, and intended for the live stock, and boiling only. There was quick lime thrown into the pond before we took any out of it. The men get spirits from the blacks.
- 22. The rheumatism complaint of the 15th, and the feverish patient of the 20th, are well. One patient. Gave the waterers the tincture. The feverish complaint, returned to duty to-day, was one of the wooding-party at Sierra Leon.
- 23. A drunken cook complained of feverish symptoms. Two patients. Six in the Dispatch's sick list. We have found all the people on the coast healthy.
- 24. One with feverish symptoms, and one with head-aeh, admitted. Four sick. We sailed in the evening, and left the Dispatch to run down to Accra. Always cold in the time of the tornadoes.
- 25. No alteration of the list. We got a very small supply at Cape Coast, either of stock, fruit, or vegetables; and none any where else on the coast.
- 26. One head-ach and one rheumatism patients complained. Six ill. These complaints are the consequence of the new rum which they got from the negroes, or free black people.

Time		-	-5	ii.	1 20	1		h	1
Days.	Hours	Thermo-	Latitude,	d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb. 27	8 12 4 8	82 82 83 82	0-10	57"		7	WSW*		h.
28	8 12 4 8	82 82 83 82	04°	24"	from Cape Appalonia 00° 09″ E	8	WSW*		h.
Martii1 Die Lunæ	8 12 8	82 83 82	03°	28"	00° 56" E	9	WSW *		h.
2	S 12 4 8	81 82 84 82	02°	41"	01° 22″ E	10	f S t SWbS **		h. cl.
3	S 12 8	82 82 82	02°	24"	00° 58″ E	11	V *		h. cl.
4	8 12 4 5	82 82 83 82	02°	11"	01° 03″ E	12	V *		h. cl.
5	8 12 4 8	83 83 84 83	02°	09"	00° 22″ E	13	f SbW t SWbW		h. cl.
6	8 12 8	83 83 83	02°	18"	00° 40″ E	14	SbW *		h.
7	8 12 8	83 83 83	02°	40"	02° 13″W	15	f SbW t SWbS *		h.
1 8					1	6	1 1		1

- 27. No alteration of the list.
- 28. The head-ach complaint of the 24th is well. The head-ach case of the 26th has a sore throat, which seems to be venereal. Five patients.
  - The feverish complaint of the 23d, and the case of head-ach of the 24th, are well. One case of suppressed perspiration, or cold, admitted. Four sick; viz. one old sore throat case, one of head-ach, one of rheumatism, and this day's complaint.
  - 2. One complained of sickness at stomach. Five sick.
  - 3. The rheumatism case of the 26th ult. and the one of cold of the 1st, are well. Three ill.
  - 4. No alteration of the list.
  - 5. The old man that came on board at Sierra Leon complained of nausea; and a feverish complaint entered. Five sick.
  - A great many fish playing about the ship. No alteration in the list.
  - 7. The complaints of the 5th are well. Three sick. The complaint of the 2d has a cough.

Time	.		1 0		1	1	1 .	1 4	1
Days.	Hours	Thermo-	Latitude.	d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Martii 8	S 12 4 8	82 83 84 83	02°	50"	03° 10″W	р. р. m.	SbW SSW *		h.
9	8 12 4 8	83 83 84 83	02°	54"	04° 27″W	17	SbW SSW *	×	h.
10	8 12 8	83 83 83		54". R.	04° 53″W	18	fW tSSW*		cl. t.
11	8 12 8	82 93 82	02°	23"	04° 56″W	19	V *	<b>X</b>	cl.
. 12	8 12 8	82 83 82	02°	29"	05° 15″W from Cape Appalonia		SW p. m.	×	cl. c.
13	8 12 8	83 83 83	03°	12"	06° 55″W	21	SW **	×	cl. c.
14	8 12 8	83 84 83	04°	07"	08° 44″W	22	V *		cl. t. l.
15	8 12 9	83 83 83	04°	13"	08° 58″W	23	V *	• • • •	cl. t. l.
16	8 12 4 5	83 52 79 81	04°	09"	09° 02″W	24	V ***		cl. t. l.
17	5 12 8	82 83 82	04°	31"	10° 02″W	25	V ***		cl. h.

- No alteration of the list. The spruce beer being all expended, wine was served to the ship's company.
- 9. One sore throat patient entered. Four ill.
- 10. No alteration of the list. Sultry disagreeable weather.
- 11. One lame complaint admitted. Five patients.
- 12. A case of incision admitted. Six sick.
- 13. The sore throat patient of the 9th is well. Five ill.
- 14. No alteration of the list.
- 15. Five patients. Exceeding bad weather, and very little wind.
- One rheumatic complaint admitted. Six ill. The old sore throat case has rheumatic symptoms. No wind, but in squalls.
- The complaint of the 2d is well. Five sick. Almost calm, except during the squalls.

VOL. I.

Time.		÷ 1	e5 ±	2 2 2	1		h	1 .
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Martii 18	S 12 S	S2 79 50	04° 54″	10° 29″W	26	V ***		cl. t. l.
19	S 12 8	81 79 79	05° 10″	10° 50″W	27	V *		cl. t. l.
20	8 12 8	80 80 79	04° 58″	11° 01″W	28	V *		cl. t. l.
21	8 12 8	80 81 80	04° 44″	11° 12″W	29	V *		cl.
22	8 12 8	81 82 81	04° 23″	11° 18″W	30	V *		cl. t. l.
23	8 12 8	\$2 \$3 \$0	04° 53″	11° 32″W	m. a. m.	<i>L</i> , * * *		cl. t. l.
24	8 12 8	82 82 82	05° 25″	12° 13″W	2	V ***		cl. t. l.
25	S  12   S	so	05° 33″	12° 53″W	3	ENE *		cl. h.
26	S 12 S	82	05° 33″	13° 05″W	4	V *		cl. h.
27	S 12 S	82	05° 39″ R.	13° 15″W	5	V* *		cl. h.
28	8 12 8	78	05° 49″	13° 33″W	6	V*		cl. h.

- 18. The old sore throat case is recovered. Four patients. The men are often exposed to the rains, in the squalls.
- 19. No alteration of the list, or weather.
- Four sick. No person on board thinks himself at all refreshed from his sleep.
- 21. One nephritic complaint, and one with eruptions, entered. Six ill.
- 22. No alteration of the list.
- The rheumatic complaint of the 16th is well. Wind in squalls only.
- 24. The case of incision of the 12th is well. Four sick.
- 25. No alteration of the list.
- 26. The nephritic complaint of the 21st is well. Three patients.
- 27. No alteration of the list.
- 28. Three sick. Very disagreeable weather.

1 Time.		6.1	5 :	1 . 50	. 1	16	<u> </u>	1 6
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Martii 29	8 12 8	82 82 82	05° 46″	13° 39″W	7	NbW *		c.
30	8 12 8	82 81 78	05° 29″	14° 29″W	8	SE p. m.		cl. t. l.
31	S 12 8	81 81 81	05° ,44″	14° 50″W	9	V *		cl.
Die Jovis April. 1	S 12 8	80 81 80	05° 23″	15° 22″W	10	f NbW t NW		cl.
2	8 12 8	80 80 80	04° 54″	16° 06″W	11	NW*		cl.
3	8 12 8	80 79 80	04° 50″	16° 42″W	12	V a. m. p. m. N *	• • •	cl.
4	8 12 8	80 80 80	04° 30″	18°_20″W	13	NbE W*		cl.
5	S 12 8	81 81 81	03° 23″	from Cape Appalonia 19° 33″W	14	f N t NNE*		c.
6	8 12 8	81 80 79	03° 29″	20° 24″W	15	NNE*	•	c. cl.
7	8 12 8	80 80 79	03° 28″	21° 14″W	p. a. m.	NNE **		c.
8	8 12 8		03° 57″	23° 05″W	17	NNE **		cl.

- 29. An asthmatic complaint entered. Four sick.
- 30. One with feverish symptoms, and one with sickness at stomach, complained. Six ill. Very cold during the squall.
- 31. The head-ach case of the 26th ult. is well. Five patients; viz. one case of remittent, one of nausea, one lame patient, one with eruptions, and one asthmatic complaint.
  - No alteration of the list. The feverish complaint of the 30th, is the case of remittent fever.
  - The complaint with eruptions of the 21st ult. is well. Four sick.
  - 3. No alteration of the list.
  - 4. The case of sickness at stomach of the 30th ult. is well. One with dry belly-ach complained. Four ill.
  - 5. No alteration of the list.
  - The dry belly-ach patient of the 4th recovered. Three patients.
  - 7. The lame complaint of the 11th ult. is well. One with ulcer entered. Three sick. Pleasant weather.
  - 8. No alteration of the list.

			,				
Days.	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aprilis 9	8 80 12 80 8 78	04° 23″	25° 06″W	18	NNE **		cl. c.
10	8 80 12 80 8 79	04° 44″	26° 48″W	19	NNE**		cl. c.
11	8 50 12 50 8 79	05° 09"	28° 23″W	20	NNE NEbN **		cl. c.
12	8 79 12 80 ·8 79	O5° 42″	30° 34″W	21	NEbE **		cl.
- 13 •	-8 80 12 80 8 79	06° 41″	32° 39″W	22	NE **		cl.
1-4	S 79 12 79 S 77	07° 45″	35° 19″W	23	NE **		cl.
15	8 78 12 77 8 77	os° 51"	37° 03″W	24	NE ***		cl.
16	8 78 12 78 8 77		39° 21″W	25	NEUE **		cl.
17	8 77 12 77 8 70		41° 48″W	26	ENE **	-	cl.
15	8 77 12 77 8 70	7	44° 05″V	27	ENE **		cl.
19	S 78	7	46° 15″V	28	ENE **		cl.

- 9. One with feverish symptoms admitted. Four ill.
- 10. No alteration of the list.
- 11. Four patients. The feverish complaint added to the list the 9th is a remitting fever.
- 12. No alteration of the list.
- 13, One feverish complaint entered. Five ill.
- 14. The remittent fever case of the 30th ult. is well. Four ill.
- 15. One with feverish symptoms admitted. Five ill. Very cold.
- 16. The old rheumatism complaint entered. Six patients.
- 17. The complaint of the 13th is well. One with ophthalmia admitted. Six sick.
- 18. The remitting fever patient of the 9th is well. One lumbago complaint entered. Six ill. The feverish complaint of the 15th is a bad remitting fever.
- 19. One head-ach case, and two with rheumatism, admitted.
  Nine patients.

Time.		ا. ه	o i	1			10	1 01
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds,	Rain or Dew.	Atmo- sphere.
Aprilis 20	8 12 8	76 76 76	14° 30″	4s° 26″W	29	V *		cl.
21	8 12 8	75 76 76	15° 35″	50° 10″W	m. p. m.	V *	•	cl.
22	8 12 8	77 76 76	16° 04″	52° 11″W	1.	ENE **		cl.
23	8 12 S	78 77 76	16° 18″	54° 24″W	2	ENE E **		cl. c.
24	S 12 8	79 77 77	16° 22″	56° 23″W	3	EbN.**		с.
25	S   12   8	80 77 78	16° 26″	58° 06″W	4	V **		c.
26	8 12 8	78	16° 24″		5	V *		c.
27	8 12 8	78	16° 32″		6	V *		c.
28	8 12 8	79	m. Antigua.		7	V*		c.
29	12	81			8	*		c.
1			1				1	

- 20. No alteration of the list.
- 21. Nine sick. We feel the weather very cold.
- 22. The head-ach patient of the 19th is well. One feverish complaint admitted. Nine ill.
- 23. No alteration of the list.
- 24. Nine patients. Some cases of ulcers who are not in the sick list. The sun is right astern a.m. which makes the thermometer highest then, though its rays do not shine upon it.
- 25. One of the cases of rheumatism of the 19th, and the feverish complaint of the 22d, recovered. Seven patients.
- 26. No alteration of the list. The men with ulcers are become scorbutic. The ship's reckoning is out.
- 27. No alteration of the list. Scorbutic symptoms appear amongst the sick.
- 28. Seven patients. Anchored at noon in English harbour. Admiral Parry commands here. Four of his Majesty's ships in the harbour.
- 29. Two cases of I cad-ach with nausea, one of them subject to it, and one with scorbutic ulcer, admitted. Ten sick. They received great damage, both on board and ashore, by a late violent hurricane. No vegetables.

Time.			1 40 H	2.5			L 1	
Days.	Hours	Thermo- meter.	Latitude, d. p. cr r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aprilis 30	S 12 S	79 80 78			9	Sb & lb		С.
Maii 1 Die Saturni	8 12 8	78 78 79			10	Sb & lb		c.
2	8 12 8	\$0 \$1 \$0	St. Chris- topher's.		. 11	NE **		e. cl.
3	5 12 8	80 81 81		v Grinder militaling, solida ya	12	NE **		cl.
4	8 12 8	\$1 80 81	17° 17″		13	NE **		cl.
5	8 12 8	81 80 79	17° 18″	From St. Christo- pher's 02° 34″W	1.4	NE EbN *		cl.
6	8 12 8	\$0 \$0 80	17° 23″	04° 23″W	р. р. m.	NE EbN *		c. cl.
7	8 12 8	\$1 \$0 \$0	17° 18″	05° 59″W	16	NE EbN *		´c.
S	5 12 5	\$1 81 81	17° 28″	06° 53″W	17	NE EbN*		c. cl.
			1		1		1	

- 30. The ulcer patient of the 7th, the one with ophthalmia of the 17th, and one of yesterday's head-ach complaints—the old one—are well. Seven patients; viz. one with asthma, one with scorbutic rheumatism, two with rheumatism, one with remitting fever, one with head-ach, and one with ulcer. We lie in a part of the harbour called Freeman's Bay.
  - The lumbago or rheumatism of the 18th ult. is well. Six patients. P. m. sailed. The men drunk with new rum.
  - No alteration of the sick list. They suffered here, too, greatly by the hurricane. No fresh provisions or vegetables to be got.
  - 3. One feverish complaint admitted. Seven sick. This island produces plenty of vegetables commonly.
  - 4. No alteration of the list. Sailed at eight a.m.
  - 5. The other head-ach man of the 20th is well. The old man who came on board at Sierra Leon admitted. Seven ill.
  - 6. The remaitting fever of the 15th, the other case of rheumatism of the 19th ult. the feverish complaint of the 3d, and yesterday's complaint, are well. Two for nausea from drunkenness, and one with eruptions, admitted.
  - 7. No alteration of the list.
  - 8. One of the cases of nausea of the 6th is well. Five sick.

f /12				1				1
Time Orake	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Maii 9	8 12 8	S1 S1 S1	17° 28″ Beata.		18	NE EbN *		c. cl.
10	8 12 8	S1 S1 S1	17° 45″	from An- tavelle 01° 36″W	19	NE EbN *		cl.
11	8 12 8	81 81 81	17° 00″	from Na- vassa 00° 28″W	20	NE EbN *		cl. c.
12	8 12 8	82 84 83	Jamaica.		21	Sb ***		c.
13	8 12 S	82 83 83			22	Sb & lb		cl. c.
14	8 12 4 8	81 83 84 82			23	Sb & lb		c. cl.
15	8 12 4 8	52 83 84 83			24	Sb & lb		c. cl.
16	8 12 8	82 84 82			25	Sb & lb	42	c. cl.
17	8 12 8	82 84 82			26	Sb & lb		c. cl.

- 9. The remittent patient returned 18th ult. and one with scurvy, admitted. Seven patients.
- One case of scarvy, and one of contusion, entered. Nine sick.
   These little islands are close to Hispaniola. I mean Beata, and Autavelle.
- 11. An old remittent fever complained of scorbutic symptoms.

  Ten patients. The man with asthma is highly scorbutic.
- 12. Sent the case of asthma, and the one of scurvy of the 9th, to the hospital, after. Anchored at Port Royal a.m. Eight sick. Sir George Rodney commands here still; but few of his Majesty's ships are in the harbour.
- 13. Sent one with scurvy to the hospital, who was not in the list.

  One with diarrhea, and three cases of scurvy, entered.

  Twelve ill. Fresh beef being allowed to the ship but once a week, I solicited the Captain to apply to the Admiral for fresh meat for our men every meat day, as many of them were scorbutic, but the Admiral would not grant it.
- 14. Sent ten scorbutic men to the hospital for the benefit of fresh diet—one of them was not in the list;—two cases of contusion, one is the old ophthalmia, he hurt his eye again, admitted. Five patients. The water we get on board is brackish, though there is as good water to be got as can be wished for.
- 15. The old scorbutic rheumatism case returned to duty; and the diarrhœa patient of the 13th is well. Three sick.
- One admitted for intemperance. Four ill. Our men continually drunk with new rum.
- 17. The contusion case of the 10th is well. Two accidents from drunkenness, one fluxed complaint, and one with sickness at stomach, admitted. Seven ill.

Time					1 .			
Days.	Hours	Thermo- meter.	Latitude d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere
Maii 18	8 12 8	81 81 81			27	Sb & lb		с.
19	8 12 8	80 81 81			28	Sb & lb		c.
20	8 12 8	81 82 82	1		29	Sb & lb		Ċ.
21	8 12 8	82 82 83			m. p. m.	Sb & lb		c.
22	8 12 8	81 84 82			1	Sb & lb		c,
23	8 12 8	81 82 82			2	Sb & lb		c.
24	8 12 8	81 81 81			3	Sb & lb		c.
25	8 12 8	81 81			4	Sb & lb		c.
26	8 12 8	78			5	V *		cl.
	1	1	1	L	1	1	1	

- The case of ulcer of the 29th ult. and one of yesterday's diarrhœa complaints, recovered. One flux case admitted. Six sick.
- 19. The case of sickness at stomach of the 17th is well. Five patients. The drunken complaint of the 16th is not in the sick list. Yesterday's admitted case of flux, a marine, is a bad dysentery.
- Two fluxed, and two feverish complaints, admitted. Nine sick.
- 21. One of the accidents entered the 17th is well; and one patient with flux admitted. Nine patients. One of yesterday's flux cases is a dysentery.
- 22. The case of dysentery of the 18th, and one of the cases of fever of the 20th, sent to the hospital. The contused patient of the 14th, the case of diarrhæa of the 20th, and one of the feverish complaints of the 20th, recovered. Four patients.
- 23. No alteration of the list.
- 24. The flux patient of the 21st is well. Three with fluxes, and one with nausea, admitted. Eight patients; besides some slight complaints.
- 25. The other case of accident of the 17th, the one of dysentery of the 20th, and one of yesterday's fluxed complaints, are well. Two fever cases; one of them was returned well of a diarrhea the 15th; and two flux patients admitted. Nine sick.
- 26. One lame complaint admitted. Ten ill. A case of dysentery died at the hospital; and the scorbutic men we sent there are seized with it. The flux cases on board are dysenteries.

Time		-0.	de,	i. 0, 0	1 :	ls.	or v.	le.
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Maii 27	S 12 8	\$0 80 80			6	V *		1.
28	S   12   S	80 80 80			7	V*		cl.
29	8 12 8	80 80 80			S	V *	•	cl.
30	8 12 8	S0 81 83			9	V *		c.
31	8 12 8	81 81 83			10	Sb & Ib		c.
Junii 1 Die Martis	8 12 8	81 82 83	Jamaica.		11	Sb & lb		c.
2	8 12 8	81 82 83	-		12	Sb & lb		c.
3	8 12 8	81 82 82		4	13	Sb & lb		c.
4	8 12 8	81 82 82			p. p. m.	Sb & lb		c.
		1				1	à.	1

- 27. Sent seven patients with dysentery—one was a slight complaint 24th—and one fever case to the hospital. Yesterday's complaint is well; and one of the fevers of the 25th slight. Three cases of dysentery, and one fever patient admitted. Five sick.
- 28. Five cases of dysentery admitted. Sent seven with flux, and yesterday's fever patients to the hospital. One complained of contusion. Three patients.
- 29. The slight case of fever of the 25th is well. Yesterday's complaint of contusion; one of dysentery; and one with feverish symptoms admitted. Three patients.
- 30. Yesterday's feverish complaint is well. Three with feverish symptoms; and one case of dysentery admitted. Six ill.
- 31. Three with feverish symptoms; and one with dysentery admitted. Ten patients. Eight returned from the hospital very weak.
  - One of the feverish complaints of the 30th ult. is well. One case of diarrhea; and one of rheumatism, who came from the hospital last night admitted. Eleven in the sick list; viz. five with dysentery; five with slight fevers; and one with rheumatism.
  - One of the feverish complaints of the 31st ult. and yesterday's complaint of diarrhœa are well. Sent three with fever and one with dysentery to the hospital. One case of dysentery admitted. Six ill.
  - One of the feverish complaints of the 30th is well. One with sore throat; and one lame complaint admitted. Seven sick.
  - 4. The three cases of dysentery recovered. Two with dysentery; one with old cough; and one slight complaint entered. Eight patients.

Time	.	5.1	- i i	- 1 6 1	.	12	1 1	4 01
Days.		Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds	Rain or Dew.	Atmo-sphere.
Junii 5	8 12 8	81 85 82			15	Sb & lb		c.
6	8 12 8	\$2 \$5 83			16	Sb & lb		c. cl.
7	8 12 8	82 85 83			17	Sb & lb		cl.
8	8 12 8	82 85 84			18	Sb & lb		cl. c.
9	8 12 8				19	Sb & lb		cl. c.
10	8	82			20	Sb & lb		cl. c.
11	12	83			21	Sb & lb		cl. c.
12	12	84			22	Sb & lb		cl.
13	12	8 81 2 83 8 \$2	Jamaica.		23	Sb & 11		cl.

- 5. The case of dysentery of the 31st ult. is well. Two with dysentery; and one with feverish symptoms admitted. Ten sick. The case of asthma died of the dysentery at the hospital.
- 6. The slight complaint of the 4th, and yesterday's feverish complaint are well. One of the cases of dysentery of the 4th, sent to the hospital. One case of flux; and one with feverish symptoms admitted. Nine ill.
- 7. The old cough patient is well. Eight sick.
- 8. The complaints of the 3d; the cases of dysentery of the 5th; and the feverish complaint of the 6th recovered. Three with feverish symptoms complained. Six patients. Two with scurvy, and two with dysentery, returned well from the hospital.
- One case of rheumatism (newly entered on board) complained. Seven ill.
- 10. One with feverish symptoms entered. Eight sick,
- 11. The complaints of the 8th; the rheumatism case of the 9th; and yesterday's complaint recovered. One man with dysentery admitted. Four sick.
- 12. Two with dysentery complained. Six ill.
- 13. The other dysentery complaint of the 4th; and yesterday's one are sent to the hospital. One dysentery patient; one lame complaint; one of intermitting head-ach; and one rheumatic complaint entered. Eight sick.

Time		-	٦. ٩				L .	1 0
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Junii 14	8 12 8	81 83 82			24	Sb & lb		cl. c.
15	S 12 8	81 83 82			25	Sb & lb		cl. c.
16	8 12 8	81 83 82			26	Sb & lb		c. cl.
17	S 12 8	S2 S3 82			27	Sb & lb		cl.
18	8 12 8	82 85 83			28	Sb & lb		cl. c.
19	8 12 8	84 85 83			29	Sb & lb		cl. c.
20	8 12 8	82 84 83			m. a. m.	Sb & lb		cl. c.
21	8 12 8	83 83 81			2	Sb & lb		cl. c.
22	8 12 8	\$2 82 82	Blue fields		3	Sb & lb		cl. h.

- 14. One man with dysentery; and one with fever, who were both at the hospital, relapsed. Ten ill.
- 15. The flux patient of the 6th is well. Nine sick. The rheumatic case of the 13th is seized with dysentery. His Majesty's ship Princess Amelia sailed for England.
- 16. One case of dysentery admitted. Ten ill. The Admiral sailed in his Majesty's ship Portland, on a cruize.
- 17. The case of dysentery; and the lame complaint of the 13th are well. Eight sick.
- 18. The intermitting head-ach case of the 18th is well. Two with dysentery; and one with hæmorrhage admitted. His Majesty's ship Guadaloupe came in. The thermometer ashore 91 at noon.
- 19. One case of dysentery, sent recovered from the hospital, relapsed. Eleven patients. P.m. the men were brought off from the hospital. One died last night of dysentery, and one some days ago. Very hot.
- 20. Ten with dysentery, of them who returned yesterday from the hospital; and one with scurvy who was there; one with feverish symptoms; one case of strain; and one with scorbutic swelling admitted. Twenty-four sick.
- 21. Yesterday's hospital case of scurvy does duty. One with contusion complained. Twenty-four ill. The hospital cases of dysentery are very weak. Sailed at six a. m. and fell in with his Majesty's ships Portland, Princess Amelia, and Seaford; and joined company with them by the Admiral's order.
- 22. The complaint of dysentery of the 16th; and the strain of the 20th are well. Four cases of dysentery; and one with feverish symptoms admitted. Twenty-seven ill. The hospital flux complaints are all rather better. Of eighteen cases of flux, eleven are marines. Anchored at noon.

Time.									
Days.	Hours	Thermo- meter.	Latitude,	. F. C.	Longi- tude in, m. or o.	Moon.	Winds,	Rain or Dew.	Atmo- sphere.
		-	ν [—		- =				1 -1
Junii 23	12 8	82 85 82	`			4	V	p. m.	h. cl. t. l.
24	8 12 5	\$2 \$5 \$3				5	V	р.	h. cl.
25	12 S	83 85 83				6	V a.m. p.m. Sb	. , .	h. cl.
26	8 12 8	\$2 \$4 \$3				7	a.m. EbN p.m.NbW **		h. cl.
27	5 12 8	53	19°	02"	from the West End Jamaica 02° 05″W	8	ENE **		cl. c.
28	8 12 8	84 84 85	20°	02"	03° 58″W	9	NE ENE**		h. cl.
29	S	83	21°	19"	Q4° 59″W	10	V *		h. cl.
36	12	83	21°	42"	from the West End of the Isle of Pines		ENE lb. *		cl.
			1		00° 34″W				1

- 23. The dysentery patient, who was the muscular pain of the 13th; the old hospital fever one of the 14th; one dysentery complaint of the 18th; and the feverish complaint of the 20th recovered. Twenty-three sick. The convalescent flux patients complain more to-night.
- 24. One of the hospital dysentery patients seized the 25th ult. and one of the 22d, are well. One case of dysentery admitted. Twenty-two patients. We lie under very high mountains, from whence descends either a constant fog or rain; and we receive none of the benefit of the sea breeze, but have frequent disagreeable puffs of wind off the mountains. The water is remarkably fine ashore; and limes are very plentiful.
- 25. The feverish complaint of the 22d is well. One with dysentery admitted. Twenty-two ill. All the flux patients, especially the hospital cases, are much weaker and worse. P. m. the squadron sailed.
- 26. The flux complaint of the 24th is well. Twenty-one sick. A. m. stood off and on towards the land. P. m. we and the Princess Amelia parted company from the Portland and Seaford.
- 27. Two cases of dysentery, one of them was the hospital fever of the 20th ult. the other of the 22d instant recovered. Nineteen sick. The Princess Amelia in company.
- 28. One of the hospital flux cases of the 28th ult. died; and two of them, one complained the 27th ult. and the other the 13th inst. recovered. The hospital flux patient, who relapsed on the 14th, is a case of vomica. Sixteen patients.
- 29 One hospital flux case, se zed the 28th ult. recovered. One feverish complaint, and one case of rheumatism, admitted. Seventeen sick.
- 30. Two flux patients; one was an hospital one, seized the 4th, and the other the 22d; and yesterday's feverish complaint recovered. One flux complaint admitted. Fourteen in the sick list. The scorbutic swelling of the 20th has got the flux from attending the sick.

Time.	-	<u>.</u>	a 1	1				
Uays.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 1 Die Jovis	8 12 4 8	82 82 83 82	21° 43″	Cape Orientis	12	f EbN t NNW *		cl. c.
2	8 12 3 8	83 84 85 1118 85	22° 06″		13	*		h. c.
3	8 12 8	S5 84 83	22° 39″		14	ENE *		c.
4	8 12 8	35 85 85	23° 06″	from Cape St. An- thony 00° 12″W	p. a. m.	V *		c.
5	5 12 8	84 85 84	23° 00″	00° 19″ E	16	V *		p. m. cl.
6	8 12 8	\$4 85 84	22° 42″	00° 49″ E	17	V *		cl. c.
7	8 12 8	83 82 81	23° 00″ Off Cuba.		18	f SSE t ENE*		cl. c.
8	8 12 8	83 83 83	23° 01″		19	f NNE t ESE *		c.
9	8 12 8	83 84 83	23° 02″		20	f NNE t ESE **		c.
10	S 12 8	83 83 82	23° 21" Hayannal		21	**	•	p. m. cl.

- Four flux patients entered. Eighteen ill; viz. fourteen of flux, one with fever, one with rheumatism, one with contusion, and one with vomica. Sailing along Cuba.
- One of the flux patients seized the 11th ult. died; both of them who died are marines. One flux case admitted. Eighteen sick. P. m. the sun's rays were very hot. The thermometer exposed to them rose, in a few minutes, 26 degrees.
- One flux case, who was an attendant of the sick, admitted. Nineteen patients. The flux man seized the 19th of May is recovered, but has a large ulcer.
- 4. One hospital flux man admitted the 27th May; one flux of the 21st; and the case of rheumatism of the 29th ult. recovered. One old hospital flux case; and the old scorbutic rheumatism patient relapsed. Eighteen sick.
- The dysentery complaint of the 25th ult. is well. One flux case; and one of hypochondria entered. Nineteen ill. Very hot.
- 6. Yesterday's hypochondria patient is well. Eighteen ill.
- No alteration of the sick list. Standing off and on towards Cuba.
- 8. One of the flux patients added the 1st to the list is well.
  An old scorbutic complaint admitted. Eighteen sick.
- The flux case of the 30th ult.; two of the 1st; and the relapsed hospital one of the 4th are well. Fourteen ill.
- 10. No alteration of the list.

Time.	1	1 ,	0.*					,
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo-sphere.
Julii 11	8 12 5	82 83 82	23° 30″		22	f SbE t EbN**		cl.
12	8 12 8	83 83 <b>\$</b> 2	24° 16″	from Ma- tansa 00° 32″ E	23	E *		h.
13	8 12 5 8	83 83 86 84	25° O3″	00° 42″ E	24	E *		h. cl.
14	8 12 8	\$3 \$3 \$3	25° 44′	00° 53″ E	25	E ***	٠	cl.
15	8 12 8	83 83 83	27° 18″	01° 02″ E	26	V *		с.
16	8 12 4 8	83 82 84 83	29° 21″	01° 40″ E	27	f WbS t SWbS		cl. c.
17	8 12 8	83 83 83	30° 31″	03° 18″ E	28	f WbS t SWbS		cl. h.
18	8 12 8	82 81 80	31° 13′	05° 08″ E	29	*		cl. c.
19	8 12 8	80 79 80	30° 17′	06° 15″ E		f NbE t NEbE *		cl.
20	S  12  S	80 81 80	30° 18′	06° 25″ E	1	ESE *		C.

- 11. One of fever, seized 31st May; one of flux, who relapsed the 19th ult.; the flux hospital cases of the 2d; and the scorbuïc complaint of the 8th recovered. Two flux relapsed cases admitted. Twelve patients.
- 12. The scorbutic swelling complaint of the 20th ult. recovered of his flux; and yesterday's recovered flux of the 2d relapsed. Twelve patients.
- 13. One marine hospital flux, took ill the 12th ult. died. Two flux patients, one of the 18th, and the other of the 22d ult. recovered. Nine sick.
- 14. One case of contusion entered. Ten ill. Squally at times.
- 15. Yesterday's case of contusion is well. Nine patients. Lost sight of the Princess Amelia. Three men came on board from a merchant ship, with very large foul ulcers to be dressed. I spared them some bark and dressings.
- 16. The old scorbutic rheumatism patient; and the relapsed flux one of the 12th are well. One flux case, and one feverish complaint admitted. Nine sick.
- 17. One flux man complained. Ten sick. Very sultry.
- 18. The feverish of the 16th; and yesterday's complaints are well. One flux and one feverish complaints entered. Ten ill.
- 19. One flux case of the 1st; one of the 5th; one of the 11th; and yesterday's complaints recovered. One from suppressed perspiration complained. Six sick.
- 20. One with eruptions entered. Seven patients.

Time.		1 .	1	1	1	1	1 .	1 .
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 21	8 12 8	81 82 82	31° 21″	06° 59″ E	2	fSW tW*		cl.
22	8 12 8	81 81 79	32° 27″	08° 28" E	3	f SW t NW ***		cł. t. l.
23	8 12 8	80 81 80	32° 47″	08° 54″ E	4	a. m. * p. m. S		cl.
24	8 12 8	81 80 80	34° 12″ R.	10° 40″ E	5	S **		cl.
25	8 12 8	79 78 78	35° 50″ R.	14° 05″ E	6	f S t WSW ***		cl.
<b>2</b> 6	8 12 8	79 79 78	37° 27″	17° 21″ E	7	fSSW t SSE **		cl. c.
27	8 12 8	79 79 78	38° 28″	18° 04″ E	8	f SSW t SSE **		cl. c.
28	8 12 8	79 80 79	40° 06″	19° 41″ E	9	V a. m. *** p. m. \$	•	cl.
29	8 12 4 8	78 78 80 78	40° 36″	22° 18″ E	10	p. m. SbW **		cl.
30	8 12 8	79 79 78	41° 20″	25° 28″ E	11	SbW ***	•	cl. c.
31	8 12 8	78 78 76	42° 02"	28° 43″ E	12	S *		c.

- 21. The flux man of the 11th, returned 19th, relapsed, from irregularities; and one flux case entered. Nine ill. The vomica recovers apace.
- 22. The complaint of the 20th is well. Eight sick.
- 23. The flux case of the 16th; and the complaint of the 19th are well. Six patients. The convalescent fluxes are much affected with the change of weather.
- 24. The vomica patient is again seized with flux, and is much worse. No alteration of the list.
- 25. No alteration of the sick.
- 26. Six in the list. Disagreeable weather.
- 27. The same patients.
- 28. The list continues the same.
- 29. The vomica man died of his flux in the night. The flux case of the 3d; the other case of the 11th; and the relapsed case of the 21st recovered. Two patients.
- 30. No alteration of the list. The old scorbutic rheumatism case has been ailing again since the rainy weather began.
- 31. No alteration of the list. The two in it are the flux man of the 21st ult.; and the one with ulcer, who was admitted May 28th with flux.

Time.		6.1	oʻ i	1 . 50		:	<u>u</u>	1 15
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aug. 1 Die Sabbati	8 12 8	77 79 78	42° 33″	31° 09″ E	13	V p. m. ***		cl. t. l.
2	8 12 8	74 73 72	43° 16″	31° 29″ E	р. р. m.	E **		cl. h.
3	8 12 4 3	72 72 74 73	43° 39″	31° 29″ E	15	ESE SE **	٠	cl. h.
4	8 12 8	72 72 70	44° 56″	32° 39″ E	16	f SEbS t ESE ***		h. cl.
5	8 12 8	68 70 69	45° 58″	33° 02″ E	17	f EbN t SEbE	•	cl. h.
6	8 12 8	67 68 68	46° 07″	35° 12″ E	18	f EbN t N		h, cl.
7	8 12 8	68 67 67	45° 52″	35° 12″ E	19	V *		cl.
8	8 12 8	66 66 66	45° 35″	37° 04″ E	20	N**		cl.
9	8128	65	45° 52″	39° 20″ F	21	f NW t SbW **		cl. h.
10	8128	69	46° 25″	43° 27″ F	22	fSbW tWbN***	+	h. cl.

- One bad flux complaint, a marine, seized yesterday; one with sore eyes; and one with head-ach admitted. Five sick.
- 2. No alteration of the list. A cold disagreeable day.
- 3. Five in the sick list.
- 4. The list continues the same.
- The relapsed hospital flux patient, returned well the 11th ultagain admitted. Six ill. Very cold.
- 6. One old hospital flux patient relapsed. Seven sick.
- 7. The head-ach complaint of the 1st is well. Six patients.
- 8. The bad case of dysentery, entered the 1st, died. One fever accompanied with dysentery; two with fluxes, one of them an old hospital one, seized a fortnight ago, though he did not complain, and now exceedingly ill, relapsed; and one relapsed case of rheumatism admitted. Eight ill.
- 9. The ophthalmia patient of the 1st is well. Seven sick.
- 10. An old flux case has relapsed. Eight patients.

-	Time Days.	Hours	Thermo-	Latitude I. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
-	Ä	E	T. a	H d	HEE	2	>	R	A SI
and the same of th	Aug.	8 12 8	65 65 64	46° 35″	46° 47″ E	23	f NbE t NW***	•	h. cl.
-	12	8 12 8	64 63 65	46° 36″	49° 32″ E	24	NW **		cl.
The state of the s	13	8 12 8	65 66 66	47° 12″	52° 22″ E	25	f W t SWbW **	٠	cl.
	14	8 12 8	65 66 66	48° 12″	56° 40″ E	26	f WSW t NW***		cl. c.
	15	8 12 8	63 64 64	48° 42″	59° 20″ E	27	f WbS t ENE *	•	h. cl.
	16	8 12 8	63 63 63	49° 04″	60° 46″ E	28	f N t NW***	•	cl. h.
	17	8 12 8	63 65 63	49° 11″	64° 16″ E	29	V *		cl. h.
	18	8 12 8	64 63 63	49° 15″	65° 23″ E	m.	f E t NNW ***		c. h.
	19	8 12 8	63 63 63	49° 31″ p. m. Scilly.	68° 14″ E	2	NNW		cl. h.
	20	8 12 8	63 63 63	49° 55″		3	a. m. * p. m. E		c. cl.
			-			1			

- 11. An old flux patient relapsed. Nine sick.
- 12. The rheumatism complaint of the 8th is well. Eight ill,
- 13. One flux patient entered. Nine in the sick list.
- 14. The old relapsed hospital flux patient died. The case of flux, admitted the 6th, is well. Seven in the list.
- 15. No alteration of the list.
- 16. Seven in the sick list. Very cold.
- 17. One man with contusion admitted. Eight sick.
- 18. One with dimness of sight entered. Nine sick.
- 19. One man with cough, an old man, admitted. Ten ill.
- 20. One of the relapsed flux cases of the 8th is well. An old relapsed hospital flux case admitted. Ten patients. Yesterday's complaint has had a diarrhæa this month past, but did not complain.

_	Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
	Aug. 21	8 12 S	63 64 63	49° 00″		4	V *		cl. c.
	22	8 12 8	66 67 70	Off the land.	<b>5</b> 0	5	V *	×	c.
	23	8 12 8	67 68 70	50° 25″		6	V*	*	c. h.
1	24	8	66 67	1 p. m. Cowes		7	W *	×	c. h.

- 21. The ulcered complaint, with flux; and the flux case of the 13th recovered. Two with contusions; and the old scorbutic swelling of the 20th June, who had the flux, become more scorbutic, and entered. Eleven in the list.
- 22. The complaint with dimness of sight is well. One flux; and one abscess cases admitted. Twelve sick.
- 23. The complaint of the 19th; and one of the cases of contusion of the 21st, are well. One old contusion complaint admitted with flux. Eleven sick.
- 24. No alteration of the list. Last night we lay at an anchor off the Needles, and this morning sailed, and anchored in Cowes Road at one p.m.

To be sent to the hospital, five convalescent flux cases; and

two old rheumatic complaints.

Sick on board—three with slight fluxes; one took ill the 9th; one the 22d; and the other the 23d; one with contusion of the 17th; one the 21st; one with scurvy of the 21st; the csae of abscess of the 22d; none of them bad; and the old scorbutic complaint of rheumatism.

END OF THE SECOND VOYAGE.

# CHAPTER III.

Meteorological and Physical Observations on board His Majesty's Ship Rainbow, from the 21st of November 1773, until the 1st of September 1774.

Time.						-	1	
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Nov.21 Die Sabbati	12	58 f 58 f 60 f	49° 59″		8	f NE t NbE **		cl.
22	12	54 f 54 f 58 f	Off Scilly.		9	fSWbS tN***	• •	cl.
23	12	54 f 54 f 61 f	48° 01″	from Scilly O2° 18″W	10	f SW t NW ***		cl.
24	12	55 f 57 f 64 f	46° 39″	02° 35″W	11	f NNW t ENE **		cl. c.
25	12	55 f 57 f 64 f	45° 16″	03° 55″W	12	f NNW t ENE **		cl. c.
26		57 60 f 67 f		06° 01″W	13	f ENE t ESE **		cl. c.
27	12	61 264 f 70 f		07° 10″W	14	f SE t SSE **		cl. c.
28	12	64 270 f 670 f		08° 09″W	p.m.	f SSE t SE **		cl. c.
29	1:	66 2 71 f 8 71 f		08° 57″W	16	f SSE t SE **		cl. c.
30	1:	8 68 2 71 f 8 71 f		09° 40″W	17	f SE t SbE **		cl. c.
				1				

- 21. Sailed last evening with his Majesty's sloop Weasel from Cowes.

  Seven in the sick list; viz. two with foul ulcers; one with feverish complaint; one with strain; one with rheumatism, one with piles; and one weak from fever.
- 22. The feverish complaint discharged. Six patients. M. the Weasel put about and stood from us. Very cold and disagreeable weather.
- 23. No alteration of the list.
- 24. One contusion; and one inflammation complaints admitted. Eight ill; but some of them do duty.
- 25. One contusion case entered, Nine sick. Agreeable weather,
- 26. The piles case is well. Eight patients.
- 27. The weak complaint of the 21st; and the contusion case of the 24th, are well. The returned feverish complaint of the 22d relapsed. Seven sick.
- 28. The case of rheumatism; and yesterday's complaint recovered. Five ill. The man with contusion admitted has a remitting fever.
- 29. One case of inflammation admitted. Six ill.
- No alteration of the list. The six are—three with ulcers; two
  with inflammation; and one scorbutic complaint, entered
  for strain the 21st.

Time.	1	- 1	.5.41	1 1	. 1	. 1	_	
Days.	Hours	Thermo- meter.	Latitude, d.p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Dec. 1 Die Mercu- rii	8 12 8	67 67 67	34° 31″	09° 58″W	18	SEbE **		cl. c.
2	8 12 8	67 66 68	32° 24″	10° 11″W	19	f ESE t SE **		cl. c.
3	8 12 8	68 68 68	30° 51″	10° 32″W	20	f ESE t SE **		cl. c.
4	8 12 8	68	28° 28" St. Cruze Teneriffe		21	f ESE t SE **		cl. c.
5	8 12 8	70			22	Sb & lb		c. cl.
6	12	67			23	Sb & lb		c. cl.
7	12				24	Sb & lb		cl.
8	1:	68 70 6 67			25	Sb & !b		cl. c.
9	1:	68 2 09 8 69			26	Sb & lb		cl. c.
10	1	8 70 2 70 8 69			27	Sb & 1b		cl. c.

- 1. One man with ulcer entered. Seven sick.
- 2. No alteration of the list.
- 3. Seven in the sick list.
- 4. The man with inflammation of the 24th; the one with contusion of the 25th; and one fever patient since are well.

  One feverish and one gravelish complaints entered. Seven sick.
- 5. No alteration of the list. Some of the men, as usual, get drunk with wine from St. Cruze. No stock to be got, and scarce any vegetables. We always lie above a mile from the wharf.
- 6. Seven in the list.
- 7. The feverish complaint of the 4th is well. Six patients.
- 8. One case of rheumatism, who was the feverish complaint of the 21st; and one purging complaint admitted. Eight sick.
- 9. No alteration of the list.
- 10. The purging complaint of the 8th is well. Seven ill.

Time.		<u>.</u> . I	a7 L 1	1			<u>_</u>	:
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in,	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Dec.	8 12 8	70 70 71			28	Sb & lb		cl. c.
12	8 12 8	67 70 73 f			29	Sb & lb		cl. c.
13	8 12 8	70 71 72 f			m. p. m.	Sb & lb		cl. c.
14	8 12 8	70 70 72 f			1	Sb & lb		cl. c.
15	8 12 8	70 70 75 f			2	Sb & lb		c. cl.
16	8 12 8	71			3	Sb & lb		c. cl.
17	S 12 8	71	28° 04″		4	V *		c. cl.
18	8 12 S	7!	26° 54″	From St. Cruze 00° 19″ E	ã	W *		c. cl.
19	8128	70	25° 23" Coast of Barbary.	01° 00″ E	6	W WSW *		c. cl.
20	812	69	25° 02″	01° 02″ E	7	f W t SW **	•	cl.

- 11. No alteration of the list. A. m. the Weasel came in. After she put about on the 22d ult. they met with a gale of wind, and went back to England.
- 12. One feverish complaint entered. Eight sick.
- 13. The rheumatism complaint of the 8th is well. One man with swelled face admitted. Eight ill. P. m. his Majesty's ships Salisbury, and Sea Horse, sailed past.
- 14. The gravelish complaint of the 4th is well. Seven sick.
- 15. The swelled face patient of the 13th is well. One feverish complaint; and one swelled face patient. Eight sick. The complaint of the 12th is a remittent fever.
- 16. Yesterday's feverish complaint is well. One complaint with eruptions; and one with swelled face admitted. These swelled faces are attended with fever, and shall therefore call the disease catarrhous fever. The water and wine which we got on board were as good as usual. Nine in the sick list. We sailed with the Weasel at 5 p.m.
- 17. One for catarrhous fever admitted. Ten sick.
- 18. The feverish complaint of the 4th; and the one with catarrhous fever of the 15th are well. One catarrhous fever patient admitted. Nine ill.
- 19. The complaint with eruptions of the 16th is well. One with abscess entered. Nine sick.
- 20. The remitting fever patient of the 12th is well. One case of catarrhous fever; and one contusion complaint entered. Ten sick.

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Time.	Hours	Thermo- meter,	Latitude, d, p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Dec. 21	8 12	69 69	24° 50″	00° 47″ E	8	f N t NW *		cl. h.
-	8	69						
22	8 12 8	70 68 68	24° 32″	00° 37″ E	9	f NW t NE *		с.
23	8 12 8	66 65 65	23° 36″	00° 47″W	10	ENE **		c.
24	8 12 8	65 65 67	20° 47″ Cape Blancho.		11	ENE **		c.
25	8 12 8	67 69 70			12	f NNE t ENE **	×	c.
26	8 12 8	68 68 67	20° 44″		13	f NNE t ENE *	.**	c.
27	8 12 8	68 67 69	19° 14″	from Cape Blancho 00° 08" E		f NNE t ENE *	×	c.
28	8 12 8	67	18° 27″	01° 05″ E	15	f NNE t ENE *	**	с,
29	8 12 8	67	17° 58″	01° 26″ E	р. а. т.	f NNE t ENE *		h.

- 21. No alteration of the list. The sea has a very disagreeable smell. Anchored from 9 a.m. to 1 p.m.
- 22. Ten in the sick list.
- 23. One catarrhous fever case of the 17th; one of the 18th; and the abscess one of the 19th recovered. Seven ill.
- 24. The contusion complaint of the 20th is well; and the remitting fever patient discharged the 20th has relapsed. M. anchored off Cape Blancho. Very cold.
- 25. One feverish complaint entered. Eight sick. The shore seems to be quite a desert. Our boats went a fishing last night, and caught with the seine a great many very large fish, both flat and round; some of the latter weighed 84lb. each, and were exceedingly fat. Their proper names I know not. We lie about two miles from the shore.
- 26. The catarrhous fever case of the 20th is become a very bad cough. Eight patients. Sailed at 9 a.m. with the Weasel.
- 27. The catarrhous fever man of the 16th; and the feverish complaint of the 25th are well. Six sick. The land is very low which we are sailing past.
- 28. One catarrhous fever case admitted. Seven sick. Six p. m. anchored about five or six miles from the shore.
- 29. Two men with ulcers, one of the 21st ult.; and one of the 1st, discharged. Two with contusions admitted. Seven ill. A great many large groupers and snappers caught along-side of the ship with bait. Sailed at 9 a.m. and anchored at 2 p. m. with the Weasel.

	em'						1		
	Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
	30	8 12 8	69 70 70	17° 58″	01° 26″ E	17	f NNE t ENE *		ħ.
	31	8 12 8	70 69 69	17° 30″	01° 16″ E	18	f NNE t ENE *	36	h.
	1774 Jan. 1 Die Saturni	8 12 8	69 69	16° 23″ Senegal road.	01° 17″ E	19	f NNE t ENE **		h.
-	2	8 12 4 8	68 70 71 70	15° 53″		20	f NNW t ENE **	<b>%</b> (	h.
	3	8 12 4 8	69 70 72 71			21	f NNW t ENE **	*	h.
-	4	8 12 8	70 71 71			22	f NNW t ENE **	<b>※</b>	h.
	5	S 12 8	71 71 72			23	f NNW t ENE		h.
	6	8 12 8	72 71 71			24	f NNW t ENE **	×	cl. h.

- 30. No alteration of the sick list. At 1 p. m. sailed, and anchored again at 6 p. m. By anchoring so often we endeavoured, in vain, to find out, with the boats, a place called Portendick; but to no purpose.
- 31. The relapsed fever case of the 24th is well; and one feverish complaint admitted. Seven patients; viz. two with contusions; one with scurvy; one with very bad cough; one with remitting fever; one with catarrhous fever; and one with ulcer. Sailed at 9 a.m.
  - 1. No alteration of the list. Five p. m. we anchored in the road off Senegal bar, about five miles from the shore. Five merchant ships lying here, to get over the bar; but it has been so rough of late, that one of them has been waiting these six weeks past, and could not even send a boat over.
  - One case of inflammation entered. Eight sick. A good deal of swell here. The Weasel in company with us.
  - 3. No alteration of the list.
  - 4. Eight in the sick list. No boat can pass the bar yet. A very thick haze or fog, with a swell.
- 5. The catarrhous fever case of the 28th is well; and one of the contusions of the 29th ult. returned to duty, though not quite well. One catarrhous complaint; one with gripes; and one lame complaint admitted. Nine sick. Disagreeable cold foggy weather. Severe wandering muscular pains are very general on board.
  - 6. No alteration of the list. No boat got over the bar yet.

Time	.	6 1	<u> </u>	. 6 6	(		<u></u>	
Days.	Hours	Thermo- meter.	Latitude d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Jan. 7	8 12 8	71 73 74	Senegal road.		25	f NNW t ENE	700	cl. h.
S	8 12 4 8	72 74 76 74			26	f NNW t ENE **	洙	h.
9	8 12 8	72 73 72			27	f NNW t ENE **	×	h.
10	8 12 8	72 72 72			28	f NNW t ENE ***	3,600	h.
11	8 12 8	72 72 71			29	f NNW t ENE ***		h.
12	8 12 8	70 70 70			m. a. m.	f NNW t ENE ***	\$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	h.
13	8 12 8	70 70 71			2	f NNW t ENE*	200	h. c.
14	8 12 4 8	70 70 72 74			3	f NNW t ENE *	×	c.
15	8 12 8	71 71 75			4	Sb & lb	<b>34</b>	c.
16	8  12  8	72 76 75			5	Sb & lb	×	c. h.

- 7. The complaint of the 31st is well. The recovered catarrhous complaints of the 5th relapsed; and two more complained; one of them slight, and not entered on the list. Ten patients.
- 8. The griped complaint of the 5th is well. Nine sick. The man with the bad cough has now a bad fever.
- One of the lame complaints has venereal symptoms. Eight patients. A great swell and surf upon the bar yet.
- 10. No alteration of the list. A very thick fog.
- 11. The inflammation case of the 2d is well. Seven sick.
- 12. Two of the catarrhous complaints of the 7th are well. Five ill.
- 13. The catarrhous complaint of the 5th; and the other of the 7th recovered. One lame complaint admitted. Four sick.
- 14. One feverish complaint entered. Five ill. One of our boats, and one of the Weasel's are gone over the bar.
- 15. No alteration of the list. The man with bad fever of the 8th, is better. The sea and land breezes are more regular.
- 16. The other case of contusion of the 29th ult.; and the complaint of the 14th are well. Three sick.

TO:			1 -	1	)	1		1
Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Jan. 17	8 12 8	73 75 75	Senegal road.		6	Sb & lb	**	h.
18	8 12 8	73 75 75			7	Sb & lb	×	h. c.
19	8 12 8	71 78 75			8	Sb & lb	×	h. c.
20	8 12 4 8	71 76 79 77			9	Sb & lb	365	h. c.
21	8 12 8	72 73 76			10	Sb & lb	Ж	h. c.
22	8 12 8	72 74 74			11	Sb & lb	×	h. c.
23	8 12 8	72 72 73			12	Sb & lb	*	h. c.
24	9 12 8	72 73 72		,	13	Sb & lb	34	h.
25	8 12 8	71 71 71			14	Sb & lb	×	h.
							1	1

- 17. No alteration of the list.
- One feverish complaint with a tumour entered. Four ill. A large swell on the bar.
- One feverish complaint; and one of contusion admitted. Six ill. The bad fever of the 9th remits now. The land wind remarkably hot.
- 20. No alteration of the list. The land wind has blown a great many different kinds of flies on board these two days.
- 21. One feverish complaint entered. Seven patients. A ship arrived from Teneriffe, by which we are informed, that a report prevailed there of our being cast away on Cape Blancho, together with the Weasel.
- 22. The other ulcer case of the 21st. Nov.; and yesterday's complaint are well. Five sick. I consulted Captain Collingwood about making a quarter cask of wine into tincture of bark; and also to recommend the same plan to be followed on board the Weasel.
- 23. No alteration of the list. The bar unpassable yet.
- 24. Five patients.
- 25. No alteration of the list.

Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Jan. 26	8 12 8	71 72 72	Senegal road.		15	Sb & lb	X	h.
27	8 12 8	72 74 73			р. р. m.	Sb & lb	×	h. c.
28	S 12 8	72 73 73			17	Sb & lb	×	h. c.
29	8 12 8	72 73 73			18	Sb & lb	×	c. h.
30	8 12 4 8	72 74	15° 46″		19	N NbW **	×	h. c.
31	8 12 8	74	15° 34″	From Barbary Point 02° 10″W	20	f NbW t NEbN ***		с.
Feb. I Die Marti	12	74	15° 11″	04° 58″W	21	f NbW t NEbN **		c.
2	12	75 76 77	15° 15″ Mayo.		22	f N t E		c.
1		1						

- 20. The complaints of the 19th are well. The boats returned on board p. m. Their crews were seized with severe griping and purging, while they waited on the beach for a smooth bar. They made a sort of tent on the beach, and some lay in it; and others lay in the boats; but they were not well covered from the dews; and they had only brackish water to drink.
- 27. Three in the list. Captain Collingwood commissioned the Lord Dartmouth armed schooner, and sent on board of her a captain, a lieutenant, a surgeon, two midshipmen, petty officers, and men from this ship.
- 18. The complaint of the 18th is well. One with feverish symptoms entered. Three sick. We got nothing from the shore of any kind.
- 29. One feverish complaint admitted. Four sick. P. m. we got the ship under weigh, and anchored again.
- 30. Three admitted with feverish complaints. Seven ill. Sailed at 9 a. m. with the Weasel.
- 31. The lame complaint of the 13th is well. Six patients; viz. five with slight fevers, and one with scurvy.
  - Two of the feverish complaints of the 30th are well. Four in the sick list.
  - 2. The complaint of the 28th is well. Three patients. P. m. we anchored at the Isle of Mayo, with the Weasel.

Time.		Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Days.	Hours	The	d. p.	n tad	Mc	M	Ra	Sp.
Feb.	8 12 4 8	75 77 79 77	15° 07″		23	f N t E		c.
4	8 12 4 8	75 75 77 75			24	f N t E		с.
5	8 12 8	74 75 77	St. Jago.		25	p. m. V *		c.
6	8 12 8	74 75 75			26	V *		cl.
7	8 12 8	75 75 76			27	*	•	cl.
8	8 12 8	75 75 76	14° 00″	from Por- to Prayo 01° 01" E	28	f E t NEbN **		cl.
9	8 12 8	, -	12° 45″	02° 43″ E	29	NEbE **		h.
10	8 12 8	74	11° 26″	04° 29″ E	m. p. m	f NEbE		h.

- 3. No alteration in the sick list. Every thing in the fields on shore is burned up for want of rain; and every living creature, as well as the people, are almost starved. They say liere, that the drought has been general amongst the islands, and that there is a plague in some of them. We got a few bullocks on board, which are very lean indeed. They have very little live stock, and are in great want of provisions.
- 4. No alteration of the patients.
- 5. The other slight fever case of the 30th is well. Three sick. We sailed and anchored in Porto Prayo Bay, at 11 a.m. An English East India packet is lying here, that put in to refit after a violent storm of wind, thunder, and lightning; which we met with off Cape Finister, and which, they inform us, on board of her, did great damage at Madeira.
- 6. No alteration of the sick. No stock to be got, nor any kind of vegetables.
- 7. The feverish complaint of the 29th ult. is well. Two patients. We caught a great many fish with the seine, and after supplying the Weasel and Packet; a good many were left, which were sent ashore to the Fort, and received very thankfully by the governor. We sailed at 6 p.m. and left the Weasel.
- 8. The old bad cough patient, with fever, well. The one with scurvy in the sick list, only.
- 9. No alteration of the list.
- 10. One griped complaint added to the list. Two ill.

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Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb.	8 12 4 8	75 76 77 70	10° 41″	from St. Jago 05° 22″ E	1	f NEbN t NW **		h. c.
12	S 12 S	76 78 77	10° 17″	06° 21″ E	2	V *		h. c.
13	8 12 4 8	78 79 80 79	10° 14″	06° 36″ E	3	a.m.— p.m.fNW t NbW *		h. c.
1-4	8 12 4 8	77 79 80 79	09° 21″	07° 26″ E	4	f NW t NbW **		h. c.
15	8 12 S	78	OS° 51"	08° 45″ E	5	f NW t NbW *	×	h. c.
16	8 12 8	78	08° 29″		6	a. m. *** p.m. * NE	[X	cl.
17	8 12 8	82	Sierra Leon.		7	Sb & lb	×	cl. h.
18	12 4 8	2 82 4 85			S	Sb & lb	*	cl. h.
19	12	2 81			9	Sb & lb	<b>X</b>	h. c.

- 11. Yesterday's complaint is well. One in the sick list.
- One with eruptions; and one with strain admitted. Three patients.
- 13. The one with eruptions does duty. One with diarrhea entered. Three ill. I made a quarter cask of wine into tincture of bark.
- 14. The strain complaint of the 12th is well. Two sick.
- 15. The case of diarrhoa of the 13th is well. One feverish complaint admitted. Two ill.
- 16. The complaint returned well the 7th, entered with feverish symptoms. Three sick. A. m. anchored off Sierra Leon. P. m. we sailed, and anchored in the river.
- 17. One case of diarrhœa complained. Four ill. We lie as usual in Freeman's bay, very near the shore, two merchant ships in the bay; one of which has been very sickly; having buried ten white men, and eleven slaves.
- 18. Yesterday's diarrhoa man is well. Three sick. Gave every man who was sent ashore on duty, and in the boats, five ounces of the tincture of bark a.m. The relapsed complaint of the 16th is remitting fever. All the people sleep on board.
- 19. One case of contusion admitted; besides the old contused elbow. Five patients. Administered the bark to the shorers employed in wooding and watering the ship. Plenty of fish caught as usual here. Though the sun shines, it is nevertheless very hazy.

Time.	-	1	1 .5	hi .	1	1		1 -	1
Days.	Hours	Thermo	Latitude,	d. p. or	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb. 20	\$ 12 4 8	81 82 83 82	Sie Lec			10	Sb & lb	X	h. c.
21	9 12 4 8	\$0 82 83 \$0				11	Sb & lb	×	h. c.
22	8 12 8	80 82 81				12	Sb & lb	×	h. c.
23	8 12 8	80 82 81				13	Sb & lb	×	h. c.
24	8 12 8	S0 81 81				14	Sb & lb	×	h. ç.
25	8 12 8	79 81 81				15	Sb & lb	Ø.	h. c.
20	8 12 4 8	80 81 82 81	08°	26"		р. a. m.	f N t NW *	×	h. c.
27	8 8	\$1 31 \$1	os°	19"	from Cape Sierra Leon 00° 32″W	17	fWNW t NW **	×	h.
									1

- 20. The complaint of the 15th is well. One with contusion entered. Four patients. The one with contused elbow is become scrophulous, and does the duty of a centinel. Gave the shorers the tincture of bark. Many of them got drunk last night, and one was left in the woods. Heavy dews, no stock to be got.
- 21. No alteration of the sick list. Gave the men the tincture of bark. P. m. the man came on board who was left ashore the 19th. Though he did not complain, I entered him in the sick list.
- 22. The contusion patient of the 19th is well. One feverish complaint admitted, from going into the water with profuse sweat on him. Five ill. Gave the people the tincture of bark.
- 23. The man who lay ashore, returned to his duty, but takes medicine. One feverish complaint, from the same cause as yesterday's complaint, entered on the list. Five sick. The men got the tineture.
- 24. The complaint of the 22d; and yesterday's are well. Three ill. Gave the shorers the tincture of bark.
- 25. The relapsed complaint of the 16th is well. One with diarrhœa; one with feverish symptoms; one with the piles; and one lame complaint admitted. Six ill. The scorbutic case much better from having been sent ashore every day. The men got the tincture of bark. P. m. we sailed.
- 26. Yesterday's diarrhœa complaint is dysentery. He has been bad this month, though he did not complain. One with diarrhœa, from eating oysters, admitted. Seven ill.
- 27. Yesterday's diarrhœa patient; and the feverish complaint of the 25th are well. Five sick. A hypochondriac case, not in the sick list.

Time.		: 1	٠,	hi	1 30	.	: 1	ч	1 0
Days.	Hours	Thermo- meter.	Latitude,	d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Feb. 28	\$ 12 4 8	80 81 83 f 82	08°	06"	00° 42″W	18	f WNW t NW *	X	h. c.
Martii1 Die Martis	8 12 8	81 83 82	07°	36"	00° 48″W	19	V *	X	h.
2	S 12 8	81 82 80	07°	os"	00° 02″W	20	N Wly *	×	h.
3	8 12 8	SO SO S1	06°	48"	00° 45″ E	21	N Wly*	×	h.
4	8 12 8	81 79 80	06°	26"	01° 41″ E	22	<b>V</b> *	×	cl. h.
5	S   12   S	so 78 79	06°	06"	from Cape Montse- rado 06° 11″ E		V *	×	h.
6	S 12 S	78	05°	20"	01° 15″ E	24	N Wly *	×	h.
7	122	so	04°	37"	02° 06″ E	25	Sb & lb	Ø.	h.
8	12 4 8	81	04°	30"		26	Sb & lb	×	h.

- 28. The piles case of the 25th is well. Three with feverish complaints; one with eruptions; and one with cough admitted; none of them were shorers. Nine in the sick list; viz. one with dysentery; one case of scurvy; one lame complaint; and one case of contusion, besides them who complained this day.
  - 1. The contusion case of the 20th ult.; yesterday's admitted cough; and one of the feverish complaints are well. Six patients, besides the one with hypochondriasis, who takes no medicine.
  - 2. One feverish complaint entercd. Seven ill.
  - One feverish complaint admitted the 29th ult. is well. These complaints seem to proceed from redundancy of bile. Six sick.
  - The complaint with eruptions of the 28th is well. Five patients. The lame complaint of the 25th is old fistula in ano.
  - 5. No alteration of the sick list.
  - 6. The man with purging and bad fever of the 25th ult. died—he was an elderly man, and subject to complaints in his bowels. The complaint of the 2d is well. Three ill.
  - No alteration of the list. Off Cetera Crue, from whence very small canoes always come on board. The natives are dexterous in swimming and diving, and, I may add, in begging.
  - S. Three patients. Sailing along the land.

Time.		1 .	1 2	1 . 6 6	1 .	1 10	5	ا ا ا
Days.	Hours	Thermo- meter.	Latitude d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo-sphere.
Martii 9	8 12 8	81 83 f 81	04° 20″		27	Sb & lb *	**	h.
10	8 12 4 8	81 81 82 81	04° 41″		28	Sb & lb	Ж	h. cl.
11	8 12 8	81 81 80	04° 44″	from St. Andrew's 00° 30″ E	29	Sb & lb	. 30	h. el.
12	8 12 8	79 80 80	Cape Le Hou.		m. a. m.	Sb & lb *	- 💥	h.
13	8 12 4 8	80 81 83 81	05° 08″		2	Sb & lb *	*	h.
14	8 12 8	82 83 82	a.m.Cape Appalonia 04° 50"		3	Sb & lb	**	cl.
15	8 12 8	81 83 82	O5° O4" Cape Coast.	02° 10″W L.O.	4	Sb & lb	**	c.
16	8 12 8	81 82 81			5	Sb & lb		c.
17	8 12 8	\$2 82 81			6	Sb & lb		C.

- 9. No alteration of the list. Our sails are black with mildew, from the heavy dews in the night, and the fog by day, and every thing on board is quite damp and mouldy; the wood shrinks and iron rusts amazingly. The ship's decks are very damp too, notwithstanding the sun shines. No person on board refreshed from sleep. These are the usual phenomena on this part of the coast.
- 10. No alteration of the list. Not far from the land.
- 11. The other feverish complaint of the 28th is well. Two in the sick list. But neither the case of scrophulous elbow, nor of hypochondria, are well.
- 12. One feverish complaint admitted. Three sick.
- 13. Yesterday's complaint is well. Two ill.
- 14. No alteration of the list. Nine a.m. we anchored at Appalonia, about five miles from the shore, and sailed at 1 p.m.
- 15. The lame complaint of the 25th ult. does duty, though not quite well. The scorbutic case only in the sick list. Some slight ophthalmic complaints who do duty. One p. m. we anchored at Cape Coast.
- No alteration of the list. We lie about two miles from the shore.
- 17. One patient only. Employed in watering the ship. The waterers get the tincture of bark in the morning. There is but little water in the pond, and that is thick. Some quick lime is therefore thrown into it. Besides, it is well strained, and to be used only for boiling the provisions; and for the stock. The scorbutic case is sent ashore every day.

Time	-	1		1 . 1				
Days.	Hours	Thermo- meter.	Latitude, d.p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Martii 18	8 12 8	83 82 80			7	Sb & lb		cl. c.
19	8 12 4 8	80 83 84 81			8	Sb & lb		cl. c.
20	8 12 8	83 83 82			9	Sb & lb		cl. c.
21	8 12 4 8	83 83 84 82			10	Sb & lb		cl. c.
22	8 12 4 8	83 84 85 83			11	Sb & lb		cl. c.
23	8 12 8	83 82 81			12	Sb & lb		cl.
24	8 12 8	81 82 82	04° 15″	from Cape Coast 00° 05″W	13	W*	-	c.
25	8 12 8	83 83 81	03° 07″	00° 26″ E	14	a. m. W p. m. SSE		cl.
26	8 12 4 8	81 82 83 81	02° 10″ R.	00° 26″ E	15	W*		cl. c.
Ī	1	1	,				1	

- 18. No alteration of the list. Gave the waterers the tincture of bark. The men get a great deal of New England new rum from the blacks, and are continually drunk.
- 19. One man in the sick list. Gave the waterers the tineture of bark. Very little stock or vegetables to be got here.
- 20. The sick list continues the same. Gave the waterers the tincture.
- No alteration of the sick. Administered the tincture of bark to the waterers. The men keep constantly drunk.
- 22. One patient only. Gave the waterers the tincture. The thermometer in the Castle of Cape Coast has not been below 82, nor higher than 86, since we arrived.
- 23. The scorbutic man is pretty well recovered, and does some duty. Seven p.m. we sailed. The people where we have touched on the coast, were generally healthy.
- 24. The patient with hypochondriasis continues bad; the scrophulous elbow case is rather worse; and the fistulous complaint not quite well. One with ophthalmia; one with excoriation; and one feverish complaint admitted. Five sick.
- 25. No alteration of the sick. Only yesterday's feverish complaint has a diarrhœa.
- 26. The feverish complaint of the 24th is well. Four sick. Neither the scorbutic man, who is not quite well, nor the old fistula in ano case, are included in the sick list.

Time.			1		,	1		
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Martin 27	8 12 8	83 82 82	01° 24″	01° 04″ E	р. р. т.	WSW SWbW *		c.
28	8 12 8	81 83 82	00° 51″	10° 37″ E	17	V *		cl.
29	8 12 4 8	82 82 84 82	00° 37″	01° 54″ E	18	V *		cl.
30	8 12 8	83 83 84	00° 14″	01° 49″ E	19	EbS *		cl.
31	8 12 8	83 83 81	00° 18" South.	02° 37″ E	20	EbS *	p. m.	cl.
Aprilis 1 Die Veneris	8 12 8	81 83 82	00° 49″	03° 16″ E	21	f SbW t SbE *		cl. c.
2	8 12 8	84 84 83	01° 16″	01° 33″ E	22	f SbE t SSW *		cl.
3	8 12 8	83 83 82	01° 48″	00° 16″ E	23	f SbE t SSW *		cl.
4	8 12 8	80 82 82	02° 16″	00° 22″W	24	f SbE t SbW *		cl.
					1	1	1	1

- 27. No alteration of the patients.
- 28. The sick list continues the same.
- 29. Four patients. Hardly an air of wind, and very sultry.
- 30. The ophthalmia case of the 24th is well. Three sick.
- 31. The case of hypochondriasis; the one with scrophula; and the excoriation case are the three in the sick list. We fell in with a New England whale fishing vessel, eight months out, and only the master bad, of a remitting fever. I spared him some bark and other medicines which I prescribed for him; he came on board of our ship.
  - Two with fluxes, marines, admitted; and one with excoriation. Six sick; besides the scorbutic and fistula cases, who do some duty.
  - 2. Three with fluxes, two of them marines, complained. Nine sick.
  - No alteration of the sick list. The fluxes are very bad dysenteries.
  - 4. The excoriation case of the 1st is seized with flux. No other alteration in the list.

Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in,	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aprilis 5	8 12 8	S2 S2 S1	03° 06″	01° 44″W	25	S SbE **		cl. c.
6	8 12 8	\$2 \$2 \$2	04° 03″	03° 20″W	26	S SbE **		c. cl.
7	S 12 8	81 80 81	04° 37″	05° 55″W from Cape Coast.	27	f SbE t SE **		c. cl.
8	8 12 8	82 80 80	04° 41″	08° 09″W	28	f SE t SbE **		c.
9	8 12 8	\$2 80 80	04° 48″	09° 47″W	29	f SbE t SEbS **		c.
10	S 12 8	81	04° 51″	12° 04″W	m. p. m	f SbE t SEbS **		c.
11	812	81	04° 41″	14° 42″W	1	f SbE t SEbS **	*	cl.
12	12	82	04° 34″	17° 08″W	2	SE **		cl.
13	1:	8 83 2 82 8 82		19° 48″V	V 3	f EbS t SSE **		cl.
14	1	8 83 2 83 8 83		" 22° 42″V	V 4	f EbS t SSE *	*	cl. c.
15	1	8 83 2 82 8 82		" 25° 10"\	V 5	SEbE *	*	c. cl.

- 5. Yesterday's flux complaint is well; but his excoriation not yet healed. Nine patients.
- 6. One with flux, a marine, complained. Ten ill.
- No alteration of the sick list. Yesterday's flux complaint is a dysentery. All the dysentery cases are very bad.
- 8. One old man admitted with the scurvy; to which he is subject. Eleven ill.
- 9. One with flux admitted. Twelve ill.
- 10. One case of dysentery of the 1st, a marine; and the case of excoriation are well. Ten sick.
- 11. One marine, a dysentery case, is well. Nine patients.
- 12. One of the cases of dysentery, a marine, entered the 2d, died. Eight sick.
- 13. One marine complained of flux. Nine ill.
- 14. One case of dysentery entered. Ten sick.
- 15. The dysentery complaint of the 13th died. One case of old rheumatism. Ten patients.

Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aprilis 16	8 12 8	83 82 82	03° 04"	27° 15″W 30° 00″W L.O.		a.m.SEbE p. m. V *	p. m.	c. cl.
17	8 12 8	83 82 82	02° 30″ R.	28° 03″W	7	V *		cl.
18	8 12 8	S1 S1 81	02° 11″	28° 35″W	8	f SE t NEbN **		cl.
19	8 12 8	80 79 81	01° 05″ R.	30° 21″W	9	f SE t NEbN **		cl.
20	8 12 8	so	00° 19″ R.	31° 32″W	10	f SE t NEbN **		cl.
21	812	82	00° 06″ North R.	32° 09″W	11	V **		cl.
22	12	80	00° 33″ R.	32° 49″W	12	f E t NE *	• • •	cl.
23	12	81	01° 17″	35° 10′ W	13	fE tNE*		cl.
24	12	80	02° 23″	36° 26″W	14	f E t NE *		cl.
25	1:	79 2 79 5 78	03° 31″ R.	37° 34″W	15	V ***		. cl.
26	1:	8 79 2 79 8 80	04° 28″	38° 54″W	р. а. m	f NEbN t ENE *		c. cl.

- 16. Yesterday's complaint does duty. Nine sick.
- 17. One case of dysentery entered. Ten ill. Disagreeable weather.
- 18. No alteration of the list. Very disagreeable weather.
- 19. One fever patient, a marine; one of dysentery; one of bellyach; and one of nausea from eating shark admitted. Fourteen ill.
- 20. Yesterday's complaint of belly-ach; and the one of nausea are well. Twelve sick.
- 21. One case of dysentery, a marine, complained. Thirteen ill.
- 22. One scorbutic man, who is very feverish, admitted. Fourteen ill.
- 23. No alteration of the list; or of the weather.
- 24. One case of scurvy admitted. Fifteen ill. All the scorbutic complaints are seamen.
- 25. One with scurvy entered. P. m. the case of dysentery of the 21st died. Fifteen sick. The convalescent dysenteries relapsed. Very bad weather, and squally.
- 26. One with nausea admitted. Sixteen ill.

Time.		1 1	i	<u> </u>	1	. (	, 1	
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aprilis 27	S 12 S	80 81 80	05° 57″	40° 39″W	17	NE **	- •	cl.
28	8 12 8	80 79 80	07° 20″	42° 02″W	18	f SE t NEbN **		cl.
29	8 12 8	80 78 79	0S° 24″ R.	43° 06″W	19	NEbN **		cl.
30	8 12 8	80 79 80	09° 27″	44° 16″W	20	NE **		c. cl.
Maii 1 Die Sabbati	8 12 8	81	10° 25″	45° 36″W 53° 40″W L.O.		NE **		c. cl.
2	12	81	11° 57″	47° 11″W 54° 37″W L.O.	22	NEbE **		c. cl.
3	13		13° 55″	48° 37″W	23	ENE **		c.
4	1:	80 80 80 81	15° 27′	′ 50° 06″W	24	f SEbE t E **		c.
5	1:	5 SO 2 S1 8 81	16° 20′	51° 41″W	25	E × .		c. cl.
		1					and the second s	and the same

- 27. The scorbutic man of the 25th does duty, though not well.

  One with fever, a marine, entered. Sixteen ill.
- 28. The fever patient of the 19th; the complaint of the 26th; and yesterday's fever man recovered. One with head-ach admitted. Fourteen sick.
- 29. The dysentery case of the 6th is well. One with dysentery; and one bowel complaint entered. Fifteen ill.
- 30. The dysentery patient of the 17th died. Fourteen sick.
  - 1. One flux patient of the 2d; the flux one of the 9th; the one with head-ach of the 28th; the bowel complaint of the 29th; and the one with exceriation of the 24th ult. are well. The man with old scurvy entered. Ten ill; viz. four with dysentery; four with scurvy; one with white swelling or scrophula; and the man with hypochondriasis.
  - 2. The scurvy man who did duty the 27th; the one with flux of the 9th ult. discharged yesterday, relapsed; and one with a large scorbutic ulcer admitted. Thirteen ill.
  - Yesterday's relapsed case of flux is well. One with scurvy; and one with scald complained. Fonrteen ill.
  - One with scurvy admitted. Fifteen ill. Resides some men have ulcers.
  - The dysentery case of the 14th ult. is well. One with feverish symptoms admitted. Fifteen ill.

(D)								
Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Maii 6	8 12 S	\$0 \$0 \$1	9 a. m. Deseada 16° 39″	61° 35″W L.O.	26	Е*		cl. c.
7	8 12 8	S1 S1 S1	a. m. Antigua.		27	Sb & lb		c. cl.
8	S 12 8	82 82 81			28	Sb & lb		c. cl.
9	, 8 12 8	82 82 81			29	Sb & lb	•	c. cl.
10	8 12 8				m. p. m.	p. m. V *		c. cl.
11	8 12 8	81	a. m. St. Chris topher's		1	V **		c. cl.
12	12	81			2	V **	•	c. cl.
13	12 8	80			3	f NE t E **		cl. c.

- 6. One feverish complaint entered. Sixteen patients. We were much out in our reckoning; but made Deseada exactly by the lunar observation. The reason assigned for it, and for our having had so rainy a passage, is our having been carried over too far to the westward, and thereby too near to the Spanish main, by a current.
- 7. One contusion complaint admitted. Seventeen sick. Sent the eight men with scurvy; one with scrophula; and two convalescent cases of dysentery to the hospital. We anchored at 8 a.m. in Freeman's bay, English harbour. Not a ship in it but our own, the Admiral and squadron being on a cruise.
- S. The complaint of the 6th is well. Five ill. The men get new rum off from the shore, and are frequently drunk.
- The complaint of the 5th is well. Four sick. No fresh meat and few vegetables to be got.
- 10. Five of the men with scurvy; and the one with scrophula returned from the hospital. One with scurvy; one with suppression of urine; and two with fevers—one of whom was returned to duty the 8th—entered. Fourteen ill. Sailed at m.
- 11. No alteration of the sick list. Anchored in Old Road, to water the ship, at 10 a.m. A number of the men drunk, p. m.
- 12. The man with suppression of urine of the 10th died (see the review for this month); and the case of contusion of the 7th is well. The man with the head-ach, discharged the 1st, relapsed. One with scurvy entered. Fourteen sick.
- 13. The fever cases of the 10th are remittents, and yesterday's head-ach complaint remits. No other alteration of the sick. We sailed at 6 a.m.

Time		0 .	0 :	1 . 26	1 .	1 .	1 -	1
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Maii 14	8 12 8	\$0 \$0 \$0	17° 10″	from St. Christo- pher's 02° 04″W	4	f NE t E **		c. cl.
15	8 12 8	S0 81 81	17° 08″	04° 02″W	5	f NE t E *		c. cl.
16	8 12 8	81 81 81	17° 19″	06° 02″W	6	f SEbE t ESE *		c. cl.
17	8 12 8	81 81 81	17° 23″	07° 30″W	7	f SEbE t E *		c. cl.
18	8 12 4 8	\$1 81 79 \$1	17° 26″	from Al- tavella 00° 18″W	8	f E t SEbE		c. cl.
19	8 12 8	78 77 79	17° 45″	01° 45″W	9	V ***		t. 1. cl.
20	8 12 8	\$1 79 81	18° 03″	from Navassa 00° 21″W	10	V ***		cl.
21	8 12 8	81 81 82	Jamaica.		11	a.m. V **		c. cl.
22	S 12 8	82 82 82			12	Sb & lb		cl.
					•		3	The state of the s

- 14. The scald complaint of the 4th is well. One lame complaint entered. Fourteen sick.
- 15. Two flux patients—one was returned to duty the 5th—and 'two with head-ach admitted. Eighteen sick.
- 16. The dysentery of the 29th ult. is well. Seventeen sick.
- The relapsed head-ach case of the 12th is well. One with dysentery entered. Seventeen ill.
- 18. The lame complaint of the 14th; and one flux case of the 15th are well. Fifteen sick. One of the remittent cases of the 10th is pretty well; but has an ulcer on his leg.
- 19. One feverish complaint entered. Sixteen ill. The people having been up all night by a top-mast being carried away, I gave each of them a wine-glass full of tincture of bark a. in. with the Captain's approbation,
- 20. No alteration of the patients.
- 21. One of the fever patients of the 10th; and the complaint of the 19th are well. One with cough entered. Fifteen sick.

  We anchored at Port Royal 5 p. m.
- 22. Sent the seven with scurvy, seamen; two with foul ulcers; the case of scrophula; and the relapsed flux complaint of the 15th, to the hospital. The men with ulcers were not in the sick list. The flux case of the 17th is well. Two with dysentery; one with eruptions; and the old relapsed head-ach again admitted. Nine sick. Sir George Rodney commands here still.

Time		0 .	lc,	1 200	1 . 1	ŝ	10	- e -
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain	Atmo- sphere.
Maii			Jamaica.					
23	8 12 8	82 83 83			13	Sb & lb		c.
2-4	5 12 8	82 82 83			14	Sb & lb		c. cl.
25	8 12 8	82 83 83			р. р. m	Sb & lb ***		c. cl.
26	8 12 4 8	82 85 86 85			16	Sb ***		c. cl.
27	8 12 8	83 84 84			17	Sb & lb		c.
28	8 12 8	82 85 84			18	Sb & lb		c.
29	8 12 8	85			19	Sb & lb		c. cl.
30	8 12 8	84			20	Sb & lb		c. cl.
31	12	85			21	Sb & lb	•	c. cl.

- As fresh beef is allowed to the ships only once a week, and as our men have been so long without any fresh meat or vegetables, and are sickly, I wrote to the Captain to apply to the Admiral for fresh beef every meat day, for the ship's company, but he would only allow it twice a week.
- 23. Sent a flux complaint to the hospital, who was not in the list.

  No alteration of the sick.
- 24. Nine in the sick list. The men get very drunk with new rum.
- 25. One of the cases of dysentery of the 22d, sent to the hospital, a marine; and the relapsed head-ach complaint are well. Seven sick.
- 26. Sent the other man with dysentery of the 22d; and the cough complaint of the 21st to the hospital. The one with eruptions of the 22d is well. One with flux; and one with pain in his stomach entered. Six ill. Very hot.
- 27. No alteration of the sick.
- 28. One with feverish symptoms admitted. Seven ill.
- 29. One of the head-ach complaints of the 15th; and the one with pain of the stomach of the 26th is well. One case of dysentery; and one of fever, marines, admitted. Seven ill.
- 30. Sent the fever case of the 28th; and both yesterday's complaints to the hospital. Four sick.
- 31. The other head-ach case of the 15th; and the dysentery of the 20th are well. Two entered with feverish symptoms. The man with hypochondriasis; the remittent complaint of the 10th, now an ulcer; and this day's complaints are the four in the sick list.

Time.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Days.	Ho	Th	Lat d. J	H H E	M	W	Ra	A
Junii 1	8	82	Jamaica.		22	Sb **		c. cl.
Die Mercu-	12	84 83						
rii	١	00						- 9
2	8	88			23	Sb **		c. cl.
	12 8	83 83						
3	8 12	83 83			24	Sb **		c. cl.
	8	83						
4	8	81			25	Sb & lb		c. cl.
7	12	85			23	50 & 10		c. ci.
	8	84						
5	8	83			26	Sb **		c. cl.
	12 4	84						
	8	85 84						
6	8	82			27	Sb **		c. cl.
	12	85			27	55		C. CI.
1	S	83						
7	8	83			28	Sb **		c. cl.
	12 4	84						
	8	85 84						
8	8					Sb & lb		0 0
3	12	83 85		,	29	30 & 10		c. cl.
	4	86						
	S	84						
9	8	83			m.	Sb **		c. cl.
	12	85 84			a. m.			
1	1	0 0			-	-		1

- 1. Two with feverish symptoms; one with dysentery; and the old relapsing remitting head-ach case, now become hectic, admitted. Eight sick. Some of the scorbutic patients in the hospital are seized with dysentery from being in the same ward with dysenteric patients.
- 2. The hectic complaint, and yesterday's dysentery case sent to the hospital. Six sick.
- 3. One with foul ulcer, now entered from a Guinea ship, added to the sick list. Seven ill. One of the feverish complaints of the 31st ult. has dysentery.
- 4. Sent the dysentery case mentioned yesterday to the hospital.

  The marine, a case of dysentery sent there the 30th ult. died.
- 5. The other fever complaint of the 1st is well. Five patients:

  The people continue to get drunk.
- 6. The other feverish complaint of the 31st is well. Four ill.
- 7. No alteration of the sick list.
- 8. One case of diarrhosa from drunkenness admitted. Five ill.
- Q. Yesterday's complaint is well. Four patients.

Time.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Junii	8	83	Jamaica.		2	Sb **		c. cl.
10	12 4 8	85 86 84						
11	8 12 8	83 85 84			3	Sb **		с.
12	8 12 8	83 85 84			4	Sb **		c.
13	8 12 8	83 85 84			5	Sb **		c. cl.
14	8 12 8	84 85 84			6	Sb & lb		c.
15	8 12 8	81 84 82			7	Sb & lb		c.
16	8 12 8	82 85 83			8	Sb & lb		с.
17	8 12 8	S1 83 83			9	Sb & lb		c.
18	S 12 8	84			10	Sb & lb		c.
19	8	84			11	Sb & lb		c.
1		}	1	1	1		8	U

- No alteration of the list. Some slight drunken complaints; not in the sick list.
- 11. One feverish complaint is well. Three ill.
- 12. Three sick.
- 13. The ulcer complaint of the 3d sent to the hospital. Two ill.
- 14. No alteration of the sick.
- 15. Two patients.
- 16. No alteration of the sick.
- 17. The marine catarrhous cough complaint of the 28th of December is become scorbutic, and sent to the hospital. He had a very bad fever, and continued long weak after it. Two sick.
- One remitting fever patient sent to sick quarters. He was taken ill the 16th, though he did not complain. Two patients.
- 19. No alteration of the list.

Time.	-	· .	05 H	1			h	:
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds,	Rain or Dew.	Atmo- sphere.
Junii 20	8 12 8	S0 85 83	Jamaica.		12	Sb & lb		с.
21	8 12 8	\$1 \$4 \$2			13	Sb & lb		c.
22	8 12 8	\$1 84 83			1-1	Sb & lb		c.
23	S 12 S	82 84 83			р. р. пъ	Sb & lb		c.
24	8 12 8	81 84 82			16	Sb & lb		с.
25	8 12 8	\$1 \$3 \$1			17	Sb & lb		с.
26	8 12 8	81 84 82			18	Sb & lb		с.
27	8 12 8	82 84 83			19	Sb & lb		c.
28	8 12 8	84			20	Sb & lb		с.
29	8 12 8	83			21	Sb & lb		c,
30	812	84			22	Sb & lb		c.
1		1		1	1			

- 20. No alteration of the list. It is a little cloudy sometimes.
- 21. One with dysentery complained, and was sent to the hospital. The list continues the same.
- 22. One lame complaint; and one with feverish symptoms entered. Four sick.
- 23. One with head-ach entered. Five ill.
- 24. The complaints of the 22d are well. Three in the sick list.
- 25. The head-ach complaint of the 23d is well. One case of contusion admitted. Three ill.
- Yesterday's contusion case is sent to the hospital; and one with wound entered. Three patients.
- 27. No alteration of the sick. Admiral Gayton arrived in his Majesty's ship Antelope.
- 28. The remittent case sent the 18th, returned well from sick quarters. Three sick.
- 29. No alteration of the list. One marine died of dysentery at the hospital.
- 30. Three in the sick list; viz. the man with hypochondriasis; the one with ulcer; and the wound complaint of the 26th.

Time		6 .1	£ 5.	1 : : : 1	.	· ·	<u> </u>	- · · ·
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 1 Die Veneris	8 12 8	S1 S4 83	Jamaica.		23	Sb & lb		c.
2	8 12 8	80 84 83			24	Sb & lb	•	c. cl.
3	8 12 8	\$0 \$3 \$3			25	Sb & lb		c.
4	8 12 4 8	\$0 83 84 \$3		-	26	Sb & lb	•	c. cl.
5	8 12 8	83			27	Sb & lb		c.
6	8 12 8	55			28	Sb & lb		c.
7	S   12   8	82			29	Sb & lb		c. cl.
8	8 12 8	86			m. p. m.	Sb & lb		cl.
9	12	85 84			1	Sb & lb		c.

- 1. No alteration of the list.
- 2. One with feverish symptoms entered. Four sick.
- 3. One with feverish complaint, from drunkenness, admitted. Five ill.
- 4. The complaint of the 2d is well. One drunken feverish complaint entered.
- 5. The complaint of the 3d is well. Four sick.
- 6. No alteration of the list. A little cloudy at times,
- 7. The complaint of the 4th is well: Three ill.
- 8. No alteration of the sick list.
- One feverish complaint entered. Four patients. P. m. the sick people were brought off from the hospital; but the hectic case was so weak, from dysentery, that he was left there. Seven invalids sent from thence, besides, on board of us.

Time.	Hours	Thermo- meter.	Latitude d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo-sphere.
Julii 10	8 12 S	81 85 83	Jamaica.		2	Sb & lb		c.
						Cl. 0- II.		al.
11	8 12 8	81 85 84			3	Sb & lb		cl.
12	8 12 8	81 84 82	Sailed a. m.		4	Sb **		cl.
13	8 12 8	80 83 83	Off Jamaica.		5	f ESE t ENE ***		cl. c.
14	8 12 8	\$3 \$3 \$3	18° 31″	from Port Royal 00° 45″W	6	f ESE t ENE **		cl. c.
15	8 12 8	1	18° 48″		7	f ESE t ENE **		cl. c.
16	8 12 8	84	18° 18"	from Point Morant 00° 37″W	8	f ESE t ENE *		c. cl.
17	12	83	18° 23″ Navassa.		9	f ESE t ENE*** p. m.		c. cl.

- 10. The ulcer complaint is well. Some of the men who came last night from the hospital are worse than when they were sent to it. Nine of them are added to the sick list. Twelve patients in all; viz. one hypochondriasis; one dysentery; one with epilepsy—he was sent for dysentery the 22d May; one convalescent flux; four scorbutic flux cases; one with scrophula; one with contasion; one with wound; and one feverish complaint. The invalids are, one blind of an eye; one of gout; one with obstructions in the abdomen, after a remitting fever; one of head-ach, from an old fracture of the cranium; one of very large foul ulcer; and two convalescent dysenteries.
- 11. One with nausea complained. Thirteen sick.
- 12. Yesterday's complaint is well. Twelve in the sick list. At 6 a. m. we sailed with the Portland, having Sir George Rodney's flag flying.
- 13. One lame complaint entered. Thirteen ill.
- One of the scorbutic flux cases seized the 21st ult. is well.
   Twelve patients.
- 15. One belly-ach complaint admitted. Thirteen sick.
- 16. The feverish complaint of the 9th is well. One with contusion entered. Thirteen ill.
- 17. One of the scorbutic flux complaints entered the 12th of May with scurvy; and the complaint of the 15th discharged. Eleven sick.

Time.	1	<u> </u>	S = 1	20 1	. 1	<i>i</i> . 1	5	1.6
Days.	Hours	Thermo- meter.	Latitude, d-p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 18	8 12 4 8	83 83 85 83	18° 44″ Cape Do- na Maria.		10	f ESE t ENE **		cl. c.
19	8 12 8	83 84 83	18° 44″		11	f ESE t ENE **		cl. c.
20	8 12 4 8	84 85	18° 58″		12	f ESE t ENE **		c. cl.
21	8 12 4 8	85 87	19° 31″ Off Cape Nicholas.		13	SSE **		c. cl.
22	12	85	19° 55" Cape Nicholas Mole.		14	ENE *		c.
23	13	8 83 2 85 8 83			15	Sb & lb		c.
24	1	8 82 2 84 4 85 8 83			p. a. m	Sb & lb		c.
25	1	8 82 2 84 8 85			17	f NNE t E *		c.
26	1	8 82 2 83 8 83	Hispa-		18	E **		c. cl.
			1	1	1	1	1	}

- 18. The lame complaint of the 13th; and the case of contusion of the 16th are well. Nine patients.
- 19. One of the scorbutic flux cases taken ill the 3d of May with scurvy; and the wound of the 25th ult. are well. One lame complaint admitted. Eight ill.
- 20. One of the hospital scorbutic patients is seized with nervous fever. No other alteration in the sick list.
- 21. The marine, a scorbutic flux case; and the lame complaint of the 19th are well. Six sick. Four of the invalids do some duty. An exceeding hot day.
- 22. No alteration of the patients. Anchored with the Portland in the Mole. There is a large town built here, since the late war, with which the Americans carry on a great trade.
- The hospital dysentery complaint is well. Five sick. Pretty good water here. Getting some of it on board.
- 24. One case of belly-ach entered. Six ill.
- 25. Yesterday's complaint is well. Five patients. Sailed with the Portland a. m.
- 26. No alteration of the sick.

Time.		6 .	le,	0.3	.		or	4 11
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Julii 27	8 12 8	83 82 82	20° 42″ Heniago.		19	f E t NE **		cl.
28	8 12 4 8	83 83 84 83	21° 16" Heniago.		20	f EbS t NE *** a. m.		c. cl.
29	8 12 8	83 83 82	22° 29″	from Mayguana 00° 11″ E	21	EbN *		с.
30	8 12 8	84 84 83	23° 26″	00° 11″ E	22	EbN *		c.
31	8 12 8	83 83 82	24° 09″	00° 11″ E	23	f EbN t SE *		c.
Aug. 1 Die Lunæ	8 12 8	\$3 83 83	25° 31″	00° 41″ E	24	f SE t SSE **		c. cl.
2	8 12 8	83 83 83	26° 51″	02° 25″ E	25	f SE t SSE **		c. cl.
3	8 12 8	83 83 82	27° 51″	03° 45″ E	26	f SEbE t SbE **		c. cl.
4	8 12 8	83	28° 43″	05° 10″ E	27	f SEbE t SbE **		c. cl.
5	8 12 8	82	29° 42″	06° 54″ F	28	f WNW t SbW **		cl.

- 27. Five patients.
- 28. No alteration of the sick. I discovered the contusion of the 25th ult. to be a fracture of the head of the os femoris. I was not on board when the accident happened, and it was never suspected at the hospital.
- 29. One head-ach case entered. Six ill.
- 30, Yesterday's head-ach complaint is well. Five sick.
- 31. No alteration of the sick list. The man with hypochondriasis; the case of epilepsy; the nervous fever patient; the one with scrophula; and one with contusion are the five sick. Four of the invalids do some duty.
  - 1. No alteration of the sick.
  - 2. Five in the sick list. A little cloudy at times, and very warm-
  - 3. Five patients.
  - 4. The list continues as yesterday.
  - 5. No alteration of the sick list.

Time.		6 ,	r. c	1 60	1 :	1/2	٠ .	60
Days.	Hours	Thermo- meter,	Latitude, d. p. or r.	Longi- tude in,	Moon.	Winds.	Rain or Dew.	Atmo- sphere,
Aug.	8 12 8	81 80 79	30° 33	″ 0s° 12″ .	E 29	f SSE t WSW * *		cl. c.
7	8 12 8	\$0 81 80	<b>31°</b> 39	from Jayguan 10° 10″		f SbE t WSW **		c. cl.
8	8 12 8	81 81 81	32° 09	12° 04	E 2	f SSW t SbE *		c.
9	8 12 8	81 81 80	33° 13	12° 34″	E 3	f EbS t SEDE *		c.
10	8 12 8	81 80 81	34° 25	13° 19″	E 4	f ESE t S *		с.
11	8 12 4 8	81 82	35° 19	)" 14° 43"		f S t SW **		C.
12	8 12 8	so	30° 09	9" 16° 54"	E 6	SW **	•	c. cl.
13	812	80	37° 1.	5" 18° 58"	E 7	f SW •t WSW **		c.
14	12	80	38° 1	6" 22° 02"	E 8	f WSW t NW **		c.
15	12	79	38° 3	S" 24° 03"	E 9	f WSW t NNW **		c. cl.

- 6. One case of contusion entered. Six ill.
- 7. One remitting fever patient, an old complaint; and one case of rheumatism entered. Eight sick.
- 8. No alteration of the list.
- 3. The case of contusion of the 6th is well. Seven sick.
- 10. No alteration of the sick.
- 11. One old cough case complained of feverish symptoms. Eight ill.
- 12. No alteration of the sick list.
- 13. Eight patients.
- The nervous fever patient recovered. One with gripes entered on the list. Eight ill. Only three of the invalids do duty.
- 15. No alteration of the sick.

Time.		0 .	£ ;	1 . 6 6			1 4	1 .:
Days.	Hours	Thermo-	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aug.	8 12 8	76 74 75	39° 22″	from Mayguana 27° 32″ E	10	f NW t NNW **	·	c. cl.
17	8 12 8	73 70 73	39° 46″	31° 13″ E	11	f N t NNW **		c. cl.
18	8 12 8	73 73 75	40° 36″	34° 36″ E	12	f N t NWbN **		c. cl.
19	8 12 8	74 72 74	41° 25″	37° 20″ E	13	f N t NWbN **		c. cl.
20	8 12 8	74 74 73	43° 13″ ·	40° 27″ E	1-4	fWSW t WNW **		cl.
21	8 12 8	72 72 72 72	44° 19″ R.	42° 20″ E	р. р. m.	f SSE t EbS *		cl. h.
22	8 12 8	71 71 71	45° 33″ R.	43° 23″ E	16	SEbS **	·	cl. h.
23	8 12 8	71 69 70	46° 38″	45° 42″ E	17	V *		c. h.
24	8 12 8	67 66 66	47° 20″ R.	48° 13″ E	18	f WbS t NbW **	•	cl. h.
25	8 12 8	65 65 64	48° 50″	52° 16″ E	19	f N.W t WNW **		cl.
	1							

- 16. The remittent case of the 7th; and the griped complaint of the 14th discharged. Two cases of contusion admitted. Eight ill.
- The complaint of the 11th is well. One with head-ach complained. Eight ill. Cold weather.
- 18. One case of wound entered. Nine ill.
- 19. One of the contusion cases of the 16th; and the head-ach case of the 17th discharged. One case of rheumatism entered. Eight sick.
- 20. No alteration of the sick list.
- 21. Eight patients. Disagreeable weather.
- 22. No alteration of the sick.
- 23. Eight ill.
- 24. The other contusion case of the 16th is well. Two complained of rheumatism. Nine sick.
- 25. One intermittent complaint admitted—he formerly had a remittent fever. Ten sick.

Time.	-		5 1	1 . 20		1 6	i.	Loi
Days.	Hours	Thermo- meter.	Latitude, d. p. or r.	Longi- tude in, m. or o.	Moon.	Winds.	Rain or Dew.	Atmo- sphere.
Aug. 26	8 12 4 8	62 62 65 63	49° 18″	from Mayguana 56° 47″ E	20	f NW t WNW ***		cl. c.
27	8 12 4 8	61 63 66 64	49° 22″	61° 10″ E	21	f NWbW t WSW ***	•	cl.
28	S 12 4 8	61 62 65 63	49° 28″	65° 28″ E	22	WNW ***	•	cl.
29	8 12 8	61 62 63	a. m. Land's End.		23	f NNW t SW **	•	cl.
30	8 12 8	64 65 65	49° 07″		24	W ****	•	cl. h.
31	8 12 8	63 66 65	10 a. m. Spithead.		25	W ***	•	cl. h.
Sept. 1 Die Veneris	12	67			26	·		cl. h.

- 26. No alteration of the sick list.
- 27. The two cases of rheumatism of the 24th are well. Eight patients.
- 28. The rheumatism complaint of the 6th is well. Seven patients. Very cold.
- 29. The intermittent case of the 25th is well. Six ill.
- One with seald; one with rheumatism; and one with contusion admitted. Nine ill.
- 31. One with cold admitted. Ten in the sick list.
  - Sent the case of epilepsy; the one with scrophulous arm; the fractured os femoris case; and the seven invalids to the hospital.

The case of hypochondriasis to go to sick quarters. He is

an officer of marines, and is insane.

Remain in the sick list, the man with wound of the 19th; the rheumatic case of the 19th; with the complaints of the 30th, and 31st ult.

#### END OF THE THIRD VOYAGE.

VOL. I.



## PART IV.

MONTHLY REVIEW OF THE SICK LIST.

## CHAPTER I.

Review of the Sick Lift, from the 30th of December 1771, to the 26th of August 1772.

In the following Review it is to be observed, 1st, That an account of the state of the weather is purposely omitted to avoid repetitions, as it is stated at full length in the Meteorological Journal, to which every person may have recourse. 2dly, That when any disease assumed a new aspect, the patient was entered upon the list as if it had been a new case; this was also attended to throughout the Journal. 3dly, That all slight severs, coughs, or indispositions, which occurred in a cold climate, are generally termed colds. 4thly, That all slight severs, head-achs, nausea, and diarrhoea, which occurred in a hot climate, are frequently called bilious complaints, or bilious indispositions.

DECEMBER and JANUARY 1771-2.

THE complaints in the fick lift, when we failed, proceeded chiefly from drunkenness; from the people lying about the decks, and fleeping in their clothes: confequently were attended with febrile fymptoms, quick and full pulses, head-achs and thirst, which were carried off by moderate evacuations and the faline mixture \*, with from five and twenty to forty drops of Huxham's effence of antimony, evening and morning, in fage tea or barley water, for drink; and by abstinence. When cough attended the fever, a spermaceti or an oily mixture was prefcribed.

For contufions, unless they were violent—when it became necessary to use evacuations at firstvarious epithems, fuch as oxycrate; ol. terebinth.; linim. fapon.; fp. vin. rect. camph. with compresses and Landages, were applied.

THE observations on rheumatism will be noticed hereafter.

WE had no fooner got into a warm climate than bilious complaints made their appearance. These will also be taken notice of in the sequel of the work.

The number on the fick lift varied frequently, but decreased towards the end of the month. patients were: eleven with colds, or flight fevers, pains and coughs; five with bilious indisposition;

two with rheumatism; three with contusion; and one with ulcer.

# FEBRUARY 1772.

It merits observation, that when we anchored on the 2d of the month in Praya Bay, St. Jago, there was only one patient, with ulcer, in the fick list; that a remitting fever made its appearance that night; the fentinel posted over the water upon the booms having been feized with it; and that two men were taken ill with it the day following: after which the fick lift increased daily with remitting fever, and bilious complaints. Whether our men were actually infected from the ship being so near to the fickly Dutch East Indiaman or not, I cannot positively say, although I am inclined to think they were. First, because infectious effluvia by winds are wafted, from difeafed bodies, to a much greater distance than there was between the fickly Dutchman and our ship. Secondly, because a number of the officers, as well as feamen on board, perceived, when they were looking towards the Dutch ship, a very disagreeable smell, if the Dutch ship veered with the wind, so as that our ship was to leeward.

Our men had no communication with the people of the Dutch ship, that having been carefully prevented by Capt. Collingwood's particular directions. Whether it be doubtful or not, that our men were

infected from the Rainbow's lying fo close to that fickly ship, the caution of changing a healthy ship's birth appears highly necessary, when the fituation of the latter is found to be fo near a dangerous neighbour, and will most certainly compensate the people for the trouble of getting the anchor up again, and moving to a greater distance from the fickly ship.

The lancet was cautiously used in curing the fever. Gentle emetics and cathartics; the faline mixture and antimonials; cooling and fubacid drink \*; and the bark, with very light diet, restored them to health t. Some of the slightest cases were cured, with an emetic of the tart. emetic.; a dose of falts the day after; Huxham's effence of antimony given twice a day; drink acidulated most commonly with lime juice or tamarinds; an abstemious diet 1; and the elixir vitr. afterwards, forenoon and afternoon, to brace up their relaxed stomachs. For those who had diarrhœa, fifteen grains of ipecacuan. was the vomit. The other cases were easily recovered.

We had hardly got over this fever, before another commenced amongst the men employed in watering the ship at Sierra Leon. The situation

<sup>\*</sup> See p. 76, 77.

<sup>+</sup> See the two first cases of the remitting fever, Part V. chap. i. § 6.

<sup>1</sup> Ibidem.

they lay in on shore, I have already described. It appears, in the State of the Sick List\*, that none of the ship's company, besides those men, and one that came from a merchant ship, were seized with sever at that time. I therefore think it evident, that their lying ashore was the sole cause of their sickness, which shall be spoken of more at large in next month's Review.

The fick lift increased until the 15th day of the month, decreased until the 19th, and afterwards increased. The patients were: fix with remitting fever; twelve with slight fever; two with diarrhea; one with nausea; one case of belly-ach; two with eruptions; one with cough; one with deafness; one with contusion; and one lame patient.

## March 1772.

The fick lift varied frequently, but rather increased to the 25th of the month, and then decreased. The diseases were: fix with remitting fever; seven with slight sever; four with head-ach; four with belly-ach; three cases of diarrhæa; one of nausea; one of erysipelas; one of piles; two of abscesses; one of guinea worm; and one lame patient.

The remitting fever of this month was much more malignant than the one at St. Jago. The paroxysms were longer, the symptoms more vio-

\* 27th Feb. 1772.

lent, and the remissions less distinct. I was obliged to give either wine; tinct. cort. Peruv.; or tinct. theb. along with the bark to enable the stomach to retain it; and to apply blisters. Two patients only were bled: the man who came from the merchant ship; and a marine who, I learned, was subject to maniacal complaints. Excepting this man, no person who had hitherto had the remitting fever bore bleeding well, or seemed to receive any benefit from it. All the sever patients but one marine recovered within the month \*.

The cases of belly-ach were cured by repeated doses of common purging salts, demulcent drink, thin rice or water gruel, and barley water, and small doses of opium.

The patient with eryfipelas, who came from a merchant ship, was cured by fomentations, cataplasms, and such medicines as relieved the bilious complaints.—These proceeded from the heat of the climate, from eating fresh sish, green plantains and bananas, immoderately, and from new siery spirits which the blacks sold them—and yielded to the same treatment as they did last month.

# APRIL 1772.

This month was remarkable for remitting fevers; and what deferves particular attention is, that, except one patient, they attacked those men only

\* See Part V. chap. i. § 6.

who

who slept ashore at St. Thomas's island, the night of the great tornado. In several patients, the fever was far more malignant than it was in any of the preceding months; the paroxysms being extremely violent, the remissions very imperfect, and of very short duration. The sever assumed different types in every period. Their fear of dying, and despondency, were particularly distressing.

In curing the fever, bleeding was never used\*.

Bilious indifpositions were numerous, and in several cases commenced with great violence. However, they all terminated favourably in a few days, by the simple method already described in the two preceding months.

The afthmatic patient had been long ill, and came on board the Rainbow from the Weafel, purposely to be longer in a warm climate, as our ship was to go to the West Indies, and the sloop straight home. He had an habitual ague also, which the bark always carried off, after a vomit and purge were administered. None of the other complaints were difficult to be removed.

The fick lift frequently varied in number; and at the end of the month was much increased. The patients were: ten cases of remitting fever; four of slight fever; nine of head-ach; two of nausea; five of diarrhœa; one of belly-ach; two from suppressed

<sup>\*</sup> See Part V. chap. i. § 6. case 7.

perspiration; one of asthma; one of cough; three of contusion; one of guinea worm; and one lame.

## MAY 1772.

In the beginning of the month we continued to feel the unhappy effects of the people's having flept on shore at the island of St. Thomas, a number of them being seized with the sever. It is somewhat remarkable that none of the officers \* who lay ashore that night had severs, notwithstanding there was no apparent difference that night in their situations: for, though they were in different parts of the house, they all had large wood fires. Some of the officers had bilious complaints, and were much asraid they would have the fever.

I treated my patients in the fame way hitherto followed, and fortunately they all recovered. One died the 5th of the month, and the feventh day of his illnefs. He did not fleep ashore, but had been much exposed to the sun in a boat for some days at that island. His fever never remitted, and he was remarkably depressed from the moment he was seized. Moderate evacuations were repeated; the saline mixture with antimonials, pediluvium, camphor, contrayerva, and blisters, were inessectually administered. I did not administer the bark, although I wish I had done it, notwithstanding the

tever

<sup>\*</sup> Petty officers are included here.

<sup>†</sup> See the first anomalous case, Part V. ch. i. § 3.

fever did not remit; and though there never appeared any indication of fuch imminent danger, far less of so speedy and fatal a termination of his case. Sorry I am that I ever paid any regard to advice on this subject.

About the latter end of the month, feveral men who had been very ill of the fever relapfed after we got into the N. E. trade \*, where I have styled those relapses intermittents, because there were intermissions. The fever was in fact the same as they had had before, with this difference only, that it now appeared in a milder form. After administering an emetic and a purge, it was soon carried off by the bark.

The number on the fick lift varied feveral times, but decreased greatly towards the end of the month. The patients in all were: four with remitting fever; four with relapsed fever; five cases of slight fever; one of head-ach; one of nausea; two of cough; one of asthma; and one with hæmorrhoids.

# June 1772.

The direful consequences of the abominable practice which seamen have, of getting drunk as often as they can, and of their passion for new spirits, were experienced †. So satally are they bent upon their

<sup>\*</sup> See the State of the Sick List, May 1792, where I have styled those relapses intermittents.

<sup>†</sup> See the Journal.

own destruction, notwithstanding the pain and difgrace of the punishment, which they are fure to incur for their drunken riots! Some of the weakest of the fever convalescents continued to relapse; a few of whom were fent to the hospital for the benefit of fresh diet, as the ship's company were allowed fresh beef only once a week. One man was killed by a fall from the main-topmast head, upon the quarter-deck. No wound appeared about him, but in one of his legs, which was broken in two places. He breathed only a few minutes, though a vein was opened in each arm, and every method taken to recover him. None of the other accidents were dangerous. They were treated after the fame manner as the contusions in January. Common dreffings were applied to the wound. I prescribed for the bilious patients, as in February. The observations on ulcers in general are subjoined to the monthly Review and cases.

The fick lift rather increased all the month. The cases were: one of remitting fever; one of relapsed fever; ten of slight fever; three of headach; four of diarrhæa; one of belly-ach; one of suppressed perspiration; one of erysipelas; one of old asthma; one of rheumatism; one of lumbago; seven of contusion; one of wound; one of fracture; one of inslammation; one of ulcer; and two lame. The fracture was that of the man killed by the fall.

JULY

## JULY 1772.

The pernicious effects of new rum were still manifest amongst the people. Happily for them we failed from Jamaica early in the month. Of the bilious patients, one only, who was a hard drinker, was feized with remitting fever. I prescribed for them as for fimilar cases in the preceding months. The guinea worm which broke, formed a large abfcefs, and became very troublefome, though great care was taken of it. A garlic poultice is esteemed the best application, on the coast of Africa, for extracting the worm, both before and after it is broke. Before it breaks, the poultice certainly facilitates a more speedy extraction of the worm; but afterwards it feems to possels no specific property in curing it. The acute pain which follows the breaking of the worm; the inflammation, and the trouble of dressing afterwards, ought to inculcate great care to guard against pulling it out rashly; for the part is very eafily healed up, if the worm be got out entire. Of the case of hæmoptysis, particular notice shall be taken next month.

The fick lift varied frequently in number. the end of the month it was much decreafed. All the cases were: one of remitting fever; five of slight fever; two of nausea; one of diarrhœa; one of hæmoptyfis; one of cough; one of rheumatifm; one of contufion; two of inflammation; and one of guinea worm.

AUGUST

## AUGUST 1772.

Fewer men complained this, than in any preceding month. Three only were added to the fick list before the 10th; viz. one with fever; one with cough; and one with furuncle. The weather becoming very cold, was particularly felt by those who were ill provided for the change, their clothes having been fold in the West Indies for rum. Most of them were consequently seized with feverish symptoms, from perspiration being suppressed. But these complaints were soon carried off by moderate evacuations, and supplying them with clothes. The other patients were mostly recovered by the methods before mentioned.

The fever case which was added to the sick list, first day of the month, was anomalous, and the man died the 13th. He had been long drooping, and had not eat his victuals regularly \*. Repeated evacuations; antimonials; Dr. James's sever powder; camphor; tinct. serp. virg. pulv.; contrayerv. co.; confect. cardiac. wine and blisters, were tried with drink.

The patient with hæmoptysis died the 2d of the month, in the ninth severe paroxysm. He was about fourteen years of age, very weakly, and was subject to cough, with complaints in his breast from an old hurt. The hæmoptysis began with a fit of coughing. In the first paroxysms large quan-

<sup>\*</sup> For a particular account of the case, see part V. ch. i. § 3.

tities of black grumous blood were vomited; but it became gradually thinner, florid, and fpumous. The stool which he had after the first paroxysm was fomewhat bloody. His stools and urine contained ever after very little or no blood; and in the intermissions he expectorated very little with his cough. From his being at first seized he became much dejected, and had always a degree of fever upon him. In the act of vomiting, he found great pain in his breast, but never complained of pain at any other time. He never had any previous knowledge of a fit coming on. The night before he died, he was feized with acute pain over one of his eyes, of which he was blind; but the pain did not continue long. His appetite never failed him, and he flept very well all the time he was bad, unless a paroxysm happened in the night.

By venefection, repeated in fmall quantities; gentle purges; refrigerating and aftringent medicines; and abstemious diet there was at one time a deceitful appearance of his recovering.

When the ship arrived at Spithead on the 26th of the month, there was only one patient, a case of rheumatism, in the sick list; so that it rather decreased all the month. In all, there were added to the sick list, one with remitting sever; ten with slight sever; two with head-ach; two with cough; one with rheumatism; two with contusion; one with inflammation; and one with abscess.

During

During the voyage, two patients with anomalous fever, one with hæmoptysis, and one by an accident died.

I think it well worthy of observation, that of all the cases of remitting sever that occurred in the voyage, not one hepatic complaint ensued; which is a sufficient encomium on the bark, as an innocent and effectual cure for remittent sever.

CHAPTER

#### CHAPTER II.

Review of the Sick List, from the 30th of November 1772, to the 24th of August 1773.

#### DECEMBER 1772.

When we left England, the complaints in the fick lift were chiefly the effects of intemperance, which did not wear off before the end of the month.

I ought to have first observed, that while the ship continued in England, the ship's company were generally healthy, notwithstanding their irregularities. In the latter end of October, however, three men were fent to the hospital very ill of sever. The head-ach was violent; and a languid pulse, with delirium; came on very early. Five with sever; two with scurvy; one with head-ach; one with cough; one weak patient; one with rheumatism; one with suffusion; eleven with ulcer; one with wound; and one lame man were sent to the hospital in that time.

The change of climate made very little alteration on the people's health all the month, as appears in the Journal. The colds, or feverish complaints, having proceeded from drunkenness, and having occurred early in the month, bore bleeding to advantage; which, together with emetics; cathar-

vol. i. u tics;

tics; gentle diaphoretics; abstinence from falt provisions; and diluting drink, soon removed them; as in January last.

The case of remitting sever was accompanied with very bad cough; and as the symptoms indicated the necessity of it, I took away some blood twice, and then followed the method of cure as mentioned in February last. The patient recovered in sixteen days.

The patient with intermittent was eafily cured by a vomit, a purge, and the bark; though he often relapfed with eafterly winds. He was a brown Creole, and had a very bad remitting fever the preceding voyage, from lying on shore at the island of St. Thomas \*.

The quinfy and parotis were fubdued by the fame means as the colds. The fore throat proceeded from a venereal cause. After proper applications were made to the fractured clavicle, the case was treated as one of the colds. Purges and an abstemimous diet removed the eruptions.

The chirurgical patients were managed as in fimilar cases on the preceding voyage. The sick list varied frequently in number. At the end of the month it contained only two patients. They were in all: one with remitting sever; one with intermitting fever; one with slight fever; seven with colds and feverish symptoms; two with nausea; three with

\* See Part V. ch. i. § 6.

cough; one with quinfy; one with fore throat; one with parotis; one with eruption; one with fractured clavicle; two with contufion; one with wound; one with feald; one with old guinea worm; one with ulcer; and one lame man.

Spruce beer began to be ferved to the ship's company on the 17th of the month.

### JANUARY 1773.

Notwithstanding the month was much hotter than it had been last February, when we were at Sierra Leon, we had fewer, yet more variety of cases. The sick list varied frequently in number, and began to increase towards the end.

Two cases of remitting fever occurred, one of which was slight; the other was a healthy young man who had never been in a hot climate before. This young man was bad, and continued very weak a considerable time after his fever; owing to his reluctance to take a sufficient quantity of bark. There was nothing singular in his case. I prescribed for him as I did for cases of sever during the former voyage; and also for the bilious complaints, which were soon removed.

The cases of fore throat, accompanied with inflammatory symptoms, were cured as such cases were in January last. It is to be observed that they occurred before the thermometer got high.

The gouty patient was indebted to nature alone for the termination of the fit, by a free perspiration of the affected part.

The

The Dispatch's men were much afflicted with bilious complaints, and feveral were affected with remitting fever; which in fome measure might probably proceed from their indifferent use of the cold bath, after we got to Teneriff. Instead of its relaxing the pores of the fkin, and thereby promoting free perspiration, which is so necessary to health, it naturally produced a contrary effect. They had just left England in the winter feafon, with their fyftems invigorated, and every fibre braced up, confequently they flood in no need of a cold bath to brace them up more. I know that in relaxed habits, when infensible perspiration is fuppressed, or defective, the cold bath, by strengthening the whole fystem, will increase it; but furely their habits were not in that state. The cold bath, to those who have been a considerable time in a hot climate, must, generally speaking, be highly beneficial, for obvious reasons; and it is absolutely necessary at times, in any climate, for the fake of cleanliness, as well as for medicinal purposes; but if people, who are not acquainted with physic, go from northern latitudes, in the winter especially, to a hot climate, and want to promote a free perfpiration by bathing, immediately upon entering into fuch a climate, they should use a warm bath, moderately, which will relax the rigid fibres of the fkin, open its pores, and increase the perspiration. By this method they would obtain their end: however, I am far from being of opinion that an indifcriminate criminate use of it would be judicious practice, or commendable.

Perhaps the best general preparatives for a change of climate, are temperance, moderate exercise, and keeping the bowels open. Evacuations may be necessary in some habits, even blood letting, but these are sew compared to the number who do not require it, or who may be injured by it.

There were added to the fick lift this month, in all: two cases of remitting fever; three of slight fever; four of nausea; one of head-ach; one of gout; one of fore throat; one of ophthalmia; one of strain; one of contusion; two of inflammation; two of abscess; one of guinea worm; and four lame patients.

## FEBRUARY 1773.

The people were remarkably healthy, notwith-flanding the great number who were employed in wooding and watering the ship. None of them slept ashore. But I think I may with propriety venture to ascribe their escaping sickness to the tincture of bark having been administered to every man regularly before they were tent ashore in the morning. What principally encouraged me to make trial of that medicine, as a preventive from sever, was the recollection of the great benefit which those who slept on shore at the island of St. Thomas, the preceding voyage, derived from taking only a single dose of bark tincture the next

U 3 morning;

morning; it having, according to their expression,

put new life in them.

One half of the diseases of this month proceeded from the men's drinking new siery spirits, which they got from the black people at Cape Coast. The case of belly-ach, and of nause of last month, most probably were owing to their eating fresh sish, unripe plantains, bananas, and what new spirits they drank at Sierra Leon, together with the heat of the climate. I prescribed for them as I did for similar cases before.

The fick lift rather decreased. The patients were: four with flight fever; two with head-ach; one with belly-ach; two with rheumatism; one with cruption; one with contusion; and one with inflammation.

### MARCH 1773.

The men continued remarkably healthy all the month, if it be remembered how great the heat was until the middle of it; the prodigious quantity of rain; the frequent calms; and the very heavy dews in the nights. Towards the end, the fick lift began to increase. The cases admitted were: two of remitting fever; one of slight fever; three of naufea; one of cold; one of cough; one of asthma; one of fore throat; two of rheumatism; one of nephritis; one of wound; and one lame man.

One of the cases of remitting fever was slight;

the other was very bad \*. I prescribed for them, and for all the other patients, as I had done before in similar cases. One of the cases of nausea was an old man who was spared to a merchant ship at Sierra Leon the preceding voyage, and was purpofely left behind by the wretch who commanded her, when he failed. When we arrived in the river, he came on board and told his difinal flory, and that he had been obliged to the natives for a bare subfistence. In his countenance both famine and disease were strongly depicted. I immediately took him under my care; and after a gentle emetic and purge, I gave him four ounces of a wine tincture of bark, twice a day; strictly prohibiting him for a long time from falt meat; and interpoling, as I thought fit, both the emetic and the purge. which means he was only afflicted with very flight indisposition; and was very well when he left us in May, in the West Indies.

The fpruce beer being expended, wine was ferved to the fhip's company on the 8th of the month. Were fpruce beer well fermented, and the feamens' labour always moderate in hot climates, I believe it would be a very falutary drink for them. But it was feldom fermented well on board the Rainbow; and during the greater part of the time it was ferved to the men when employed on hard work, such as cutting wood: each man had half a pint of rum,

or a pint of wine, befides his beer and tincture of bark every morning, which supported him in health.

### APRIL 1773.

There was little alteration in the fick lift before the 15th of the month. The weather then becoming cold, a few feverish complaints, some cases of rheumatism, and some scorbutic symptoms made their appearance; and at the latter end it was considerably increased. Two of the severish cases became remitting severs; and signs of scurvy made their appearance, in one case, as soon as the patient got over his sever. The patients were: two with remitting sever; four with slight sever; three with head-ach; one with belly-ach; four with rheumatism; one with ophthalmia; and two with scorbutic ulcers.

With respect to the scorbutic cases, I judged wine proper for them, which I did not allow to the other patients. I gave them all the quantity \*, with bark and elixir of vitriol; taking care likewise to promote the cuticular, and urinary discharges, as well as to keep their bodies open with lenitive purges. The ulcers were carefully dressed as often as it seemed necessary.

Though they were not cured by this method, they were much relieved. When we arrived at Antigua and St. Kitt's, we could neither

<sup>\*</sup> Here, and when all the quantity, or his wine, is mentioned in future, is meant all their allowance, which was a purser's pint daily.

get fruit, vegetables, nor any fresh provisions: a violent hurricane, which happened there not long before, had destroyed every thing, both in the gardens and fields. I was therefore obliged to persist in my own method with the sick.

The other patients were treated as fimilar cases had been treated in former months.

#### MAY 1773.

This proved the most unhealthy month we had hitherto experienced; few, however, except scorbutic patients, were added to the fick list before the 18th, when the dysentery made its appearance. In all there were added to the fick list: four with remitting fever; one with intermitting fever; eleven with slight fever; four with nausea; one with headach; twenty-one with dysentery, some of which cases were mild; two with diarrhæa; nine with scurvy; one with eruption; six with contusion; and one lame patient.

The bilious indispositions and lame complaints were the consequence of immoderate drinking, and were cured as in former months. The cases of remitting sever, and chiefly the cases of dysentery, I fent to the hospital. Some of the latter were cured on board by evacuations, opiates, and a very light diet. Such were indebted to good constitutions for having been slightly attacked, and for their speedy recovery from that fatal disease. By evacuations I here mean emetics and cathartics only,

for not a man was let blood \*. With regard to the method which I followed in the cure, I shall briefly insert it at the end of the Review of June.

A remarkable change in the health of the people, particularly amongst the marines, to whom the dyfentery (which now attacked the men) proved most fatal, having taken place this month, it may be worth while to paufe and inquire what were its procatarctic and proximate causes. Such an inquiry feems to be the more necessary, because all the other ships' companies at Port Royal were healthy; and because there was not a patient with flux at the hospital before our men were fent to it; where it foon fpread amongst our scorbutic people, who were put in the fame wards with the dysenteric patients. I cannot suppose that there was a particular tendency in the constitution of the air, to produce the dysentery on board of the Rainbow, more than on board any of the other ships which were lying near to us. The following queries may perhaps throw some light on the subject. If they do not explain the real cause of the flux, as well as of the other diseases on board the Rainbow, I leave it to every perfon to form his own opinion on the fubject.

Though we continued very healthy during the great heat, the very heavy rains, the exceeding denfe and moist atmosphere, and very frequent

<sup>\*</sup> See Part V. § 5.

calms which occurred in March; during part of the month of April; during the very light winds, with cloudy atmosphere in the first part; and a very cold trade wind in the latter part of April-Were not these circumstances, together with our long passage from Cape Coast to Jamaica; the men all this time having neither fresh meat, vegetables, nor fruit; but often, in shortening fail, exposed to scorching heats, deluges of rain, and very cold winds:-Were not these concurring circumstances sufficient to form the procatarctic cause of the scurvy appearing in the end of April; and of the dyfentery appearing in the end of May? Were the immoderate use of vegetables, of fruit, of new fiery spirits, brackish water, which we unfortunately got on board for fome time, and the unusual hot weather, at Jamaica, sufficient to form the proximate cause of these diseases, particularly of the flux?

By the by, with respect to the badness of the weather on our passage to the West Indies, it ought to caution others from ever attempting to make their passage from the Gold Coast, to any part of the West Indies, or Europe, without going to the southward of the equator. The advantage arising from making our passage in that manner, the first and last voyage, appears very evident in the Journal.

As to the possibility of preventing the dysentery from becoming epidemical, or so fatal as it was, I shall state two other queries.

The dyfentery not having made its appearance until a week after we arrived at Jamaica—in which time it was possible to have got the ship resitted for sea; and for the men to have supplied themselves with plenty of vegetables, fruit, and with a sufficient quantity of sugar and cossee, to have served them on the passage homeward\*—Would it not, in all human probability, have been prevented from becoming either so general, or so fatal, had we been permitted to sail from thence in eight or ten days time?

But as the ship was detained there so long, would it not have been the means of repairing, in some measure, the men's health, and of rendering the flux less epidemic and malignant, to have allowed the ship's company fresh meat every meat day?

However, the Admiral did not think proper to grant either of the applications which were made to him by Captain Collingwood, on both these subjects.

His Majesty's ship Phœnix, after having one year made a very long passage from the coast of Africa to Jamaica, and being detained there longer than usual, the ship's company, though they were healthy when the ship arrived, were seized with a very bad sever, which every one supposed would not have happened, had she been sent from thence soon:

<sup>\*</sup> Though all seamen are not so prudent as to provide these—many of them are.

and that the fever would have been rendered lefs malignant, and lefs epidemic, had they been fent to fea as foon as it made its appearance. Unlefs his Majesty's service absolutely prevents it, the ship that has been upon the coast of Guinea, when she touches at Jamaica, should be resitted as speedily as possible and fent home to England, for economical and political reasons.

## June 1773.

The dysentery still continued to rage amongst the people, attacking young and old; but none of the officers were seized with it. However, this is not much to be wondered at, if it be considered that they lived better in every respect, and were not exposed to so many hardships as the people were: nor did they afterwards run into the excesses which these thoughtless creatures did at Jamaica.

All the attendants of the fick were affected with flux. Many of the patients relapfed after they came on board, from the hospital, as recovered. The fick, who remained on board, escaped better than those fent to the hospital; though some of them also relapsed. Four died on shore, and several of those who were sent on board, very weak. Six, of the ten who died, were marines.

I cannot help lamenting the fate of the weak hospital flux, and some of the other patients, who feemed to fuffer merely from our anchoring at Blue Fields. They were apparently recovering before we put into that harbour, which produced an immediate alteration amongst the sick for the worse. The perspiration being checked, fell upon the already very weak and relaxed intestines, which again increased the slux; and re-excited the instantation of the rectum, which the black, putrid, and highly offensive stool or two, generally voided before death, is a presumptive mark of, as they who have examined the bodies of those who have died of dysentery have always found \*.

I generally began the cure by giving fifteen grains of ipecacuan. in powder; fometimes, I only gave five or fix grains; repeated that quantity two or three times, and wrought it off with warm water. The day after, I ordered an ounce of the common purging falts, with manna or coarfe brown fugar, most commonly the latter; or, from

half

<sup>\*</sup> But dissections not being allowed on board of his Majesty's ships, unless on some extraordinary occasion, I can say nothing from my own observation of the morbid appearance of the intestines. I shall therefore refer the reader, desirous of such information, to Sir John Pringle's Observations on the Diseases of the Army, page 237; and Cleghorn, on the Diseases of Minorca, page 246. Such an examination of the dead bodies on board of a ship would, indeed, not only be attended with much inconvenience; but would likewise occasion much discontent, and murmuring amongst the people, however beneficial it might prove.

half a drachm, to two fcruples of rhubarb, sometimes with nutmeg, and at other times with two grains of calomel. The vomit and purge were afterwards repeated, according to circumstances, and an opiate given every night from their first complaining: Demulcent drink—either thin water, or rice gruel, barley water, and the white decoction; sometimes water and a toast in it only were allowed. When the case was favourable, this simple method was sufficient for the cure.

But when the difease was violent, and the patients were much reduced in the beginning of their illness, as they who came from Port Royal Hospital were, the flux, violent gripes, and tenesmus, became very obstinate, and the cure exceedingly difficult. Emollient somentations for the abdomen, emollient and antiseptic clysters, besides internal medicines, and a farinaceous diet, I am forry to say it, were too often unsuccessful \*.

The cure of the cases of remitting sever, which were not sent to the hospital, and of the bilious complaints, was effected by the method I have already laid down in the Review of the former voyage. The hæmorrhage was cured by taking away some blood, gentle purges, and a temperate regimen. An account of the vomica shall be inserted in the Review of next month.

All the difeases of June were: twenty-four cases of dysentery; one of diarrhoa; two of remitting sever, one of which was mild; ten of slight sever; one of cough; one of vomica; one of fore throat; one of hæmorrhage; one of scurvy; three of rheumatism; one of muscular pain of the side; one of strain; one of contusion; and two of lameness.

### July 1773.

Though the dyfentery was on its decline, a few very bad cases occurred this month; and two marines died of it: one was at Port Royal Hospital, the other was added to the fick lift last month. They feemed to recover until the rainy weather came on, which occasioned a number of other relapfes amongst the convalescents, as well as of theirs. The fick lift rather decreased all the month, at the end of which there were only two in it. The patients in all were: fixteen with dyfentery, many of them mild cases; one with diarrhœa; two with flight remitting fever; one with cold; two with rheumatism; one with hypochondriasis; one with fcurvy; one with eruption; one with contufion; and one with ulcer. I prescribed for them as I did in preceding months.

The patient with the vomica died the 29th of the month. As his case appeared to me singular, I have inserted it at length.

# The Case of Vomica.

Lewis Campbell, feaman, aged about 35, rather weakly, was fent to Port Royal Hospital for dysentery, and returned on board as cured; but he soon relapsed, and his flux was attended with suppression, and great pain in voiding of his urine. Such medicines as I judged proper were prescribed for him. On the fourth day of his relapse, he complained of cough, and pain in his back; his purging was also accompanied with gripes and tenesimus. As I imagined the pain of his back proceeded merely from weakness, and his cough from catching cold, in turning frequently out of bed in the night to the stool, I continued his former medicines. He complained on the 17th of June.

2d Day after complaining of the cough, he was much the fame, and his medicines were continued.

3d, He complained of greater pain about his back, and his cough was more urgent and dry. His pulse was quick and small, and his countenance at times slushed.

I continued his medicines, and ordered ten grains of fperm. cet. made into a bolus, with ol. olivar. opt. to be taken when the cough was urgent.

4th, He rested ill in the night.

5th, No alteration was made in his medicine.

6th, His flux was better, but his cough was vol. 1. x troublesome.

troublesome. An opiate was prescribed twice a day, together with the other medicines.

7th, He had a good night.

8th, He complained much of the cough; I repeated the medicines.

9th, He was better, and expectorated freely very ill concocted matter. He was feverish at night, as were all the valetudinarian fluxes \*. I therefore, besides the former medicines, ordered him the following draught four times a day. R. Tinct. cort.vin. \(\frac{3}{2}i\); pulv.cort.Peruv.\(\frac{3}{2}s\); aq. simp.\(\frac{3}{2}is\); tinct. theb. gut. iii. m.

10th, He was much better, though he became feverish towards night. The medicines were all repeated.

11th, His flux was abated much, and the tenefmus and gripes were eafy. He expectorated, particularly in the morning, a large quantity of dark coloured fetid matter, with the cough, after which he found himfelf eafier. He had been long fubject to cough, and complaints in his breaft, from a hurt which he had formerly received in the right fide. I ordered him to use often a foft linctus, made of fperm. cet. mel. Britan. acidulated with sp. vitr. ten. and a little of the tinct. theb. His drink was a pectoral decoction.

12th, There was no alteration.

13th, His flux and its fymptoms were very mo-

<sup>\*</sup> We were now at Bluefields.

derate; but the expectoration, or rather vomiting of the matter in large quantities every morning, continued, which nearly fuffocated him. The matter was very offensive to his taste and smell. Before the vomitting in the morning, the pain of his breast, especially of the right side, was so great, that he could only lie on his back. He had constant febricula; his countenance and hands were fallow and squalid; his hair was quite dry, and stood erect, with prostration of strength and spirits. I epeated his medicines, and allowed him nourishing diet \*.

14th, He was much the fame, and complained more of his flux and gripes. The medicines were continued. The fit of vomiting the matter commonly happened in the morning with cough, when he was at the stool, owing, perhaps, to the matter being collected in the night, and pressing upon the diaphragm when he was in an erect posture.

15th, He had a very restless night with his cough. I ordered his medicines to be repeated. P. m. he was frequently purged and griped in the day.

16th, There was no alteration for the better. He took his medicines regularly.

17th, He was very weak from the flux, cough, and vomiting of the fetid pus, which was highly offensive to him. He now expectorated a great quantity day and night. I continued his linetus,

\* See Part V. end of § 5.

ptisan, opiates, and diet, allowed him half a pint of wine\*, and gave him an ounce of the tinct. cort. vin. four times a day.

18th, No alteration.

19th, He expectorated the pus in greater quantities through the day with his cough, and of the fame dark colour. The hectic fever and flushed countenance continued with partial colliquative sweats. He had very little appetite, and was thirsty in the night. I omitted the linctus; again ordered him the bark as on the 9th; and continued his ptisan, opiates, wine, and diet.

20th, He was no better, but extremely weak, and his countenance much fallen. I prescribed five doses of the bark.

21st, He had a better night than usual, and was more cheerful. I ordered him fix doses of the bark. His opiate now was a grain and a half of opium.

22d, He rested worse than he did the preceding night. He expectorated and puked a quart of pus in twenty-four hours; his flux and gripes were very moderate. I increased the dose to two scruples of the bark, and gave him fix doses in the day, with his drink, diet, wine, and opiates as before.

23d, He was reftless in the night, and very feverish. I repeated all his medicines.

<sup>\*</sup> It is to be observed that the measures in the navy are one eighth less than they are on shore.

24th, There was little or no alteration.

25th, He rested much better in the night, his flux was gone, and he expectorated less: he was fick at the stomach; I ordered him ten grains of ipecacuan. which puked him, and gave him two copious stools. During the time of his vomiting his nose bled a little. Afterwards he took his bark and wine as before.

26th, He was in much better fpirits, and looked better. I repeated his bark, with his other medicines and diet as before.

27th, He had now feldom the hectic heats, colliquative fweats or thirst, and was regaining both his appetite and strength. He coughed little, expectorated moderately; the pus was no longer fetid or offensive to his taste, and was of a laudable colour and consistence. He remarked that the slies and infects which, before he began to take the bark, always devoured the pus, would not now touch it. The attendants and people about him made the same observation: I ordered six drachms of the bark in the day, in the same manner as before; and an opiate at night only.

28th, He found himself much better, and complained of no pain about his breast, but selt pain when he lay on his right side. P. m. by the wine being omitted with his bark, without my knowledge, he puked and had several stools, and was severish at night.

29th,

29th, He refted very indifferently in the night, and had little appetite. I ordered his medicines, wine, and diet, to be repeated. His opiate for some nights past was two grains of opium.

30th, He was much better, his medicines and diet agreeing with him. P.m. the cough, the pain of the breaft, and hectic fever returned.

31st, He was very indifferent, after a restless night. I ordered him two scruples of rhubarb, and only half an ounce of bark at four doses, with wine, and the opiate. The rhubarb gave him two copious stools.

32d, He was much better after a tolerable night's rest. He took his bark.

33d, He continued better, and perspired freely. I repeated the bark, wine, and opiate.

34th, He complained of weakness only, expectorated a little laudable pus, and had no bad fymptoms. I continued his medicines.

35th, He had feveral ftools in the night. I prefcribed his medicines and diet as before.

36th, His perspiration stopped, he was griped and frequently purged in the night; most probably from the disagreeable change of weather \*. I prescribed a dose of rhubarb, and afterwards the bark, wine, and opiate as before.

37th, He passed a restless night from the gripes and fever. A.m. he complained less though he

<sup>\*</sup> See the Journal.

was very feverish. I repeated his bark and wine. P. m. he was hot, thirsty, very much dejected, and complained of great weakness. I gave him his opiate.

38th, The flux continued; he had a short, dry, urgent cough, and was much weaker and defponding. I omitted the bark, and prescribed the diafcord. mixture with his wine and fmall doses of opium. P. m. he was more feverish and began to rave.

39th, He was much worfe; his pulse was very fmall and quick, he was very thirfty, and raved more, and was hungry. I repeated his medicines as on the 38th day. P. m. his extremities became cold, he was quite restless, and his pulse very irregular, and feemed to vibrate at times. I ordered him wine only.

40th, He had one stool in the night. His countenance was bippocratic; there was a cadaverous fmell about him, and he grew much weaker. I continued his wine.

41st, His countenance was frequently distorted with convulfive twitches; he muttered delirioufly, and was quite restless. His pulse was thready and tremulous, and his hands were convulfed. In this manner he died at midnight,

Had we been fo fortunate as to have had westerly winds and good weather a fortnight, or three weeks longer, until he recovered more strength, in all pro-

> x 4 bability -

bability he would have recovered; but the easterly wind destroyed him.

### AUGUST 1773.

It being rainy until the 20th of the month, the 7th and 12th days excepted, the fick lift continued increasing. The patients were: eleven with dysentery, chiefly cases of relapse; one with head-ach; one with cough; one with scurvy; one with rheumatism; three with contusion; one with ophthalmia; one with abscess; and one with a dimness of fight.

One patient, who was highly fcorbutic, and a confiderable time bad before he complained, died of relapfed dyfentery\*. A marine likewife died of dyfentry: a very bad fever accompanied his flux †.

All the patients were treated as in former fimilar cases.

Ten of the men died this voyage of the dyfentery. Four died at Port Royal Hospital, and six on the passage from Jamaica to England; four of whom had been at the hospital. I reckon the patient who had the vomica one of the four. One man fell overboard and was drowned on the homeward passage from Jamaica.

CHAPTER

<sup>\*</sup> See case 6th of the Jamaica dysentery.

<sup>†</sup> See the 5th case of the Jamaica dysentery.

### CHAPTER III.

Review of the Sick List, from the 21st of November 1773, to the 1st of September 1774.

November and December 1773.

The people continued amazingly healthy during the time that the ship stayed in England, considering their intemperance and indiscretion. One man was drowned alongside of the hulk, which the men were put on board of, whilst the ship was in dock; one was killed by a fall from the ship's side into the dock: six weak from slux and other diseases; six with sever; four with rheumatism; two with slux; two with cough; one with ulcer; and one with contusion were sent to the hospital in that time, besides the men who were sent when we arrived from Jamaica.

The difeases of those in the sick list when we sailed, proceeded, as on former voyages, from great intemperance and getting cold. Their number continued to increase until the end of December, when it was the same as at the time of our sailing.

A new fever appeared on the 13th of December, whilst we lay at Teneriss. I call it new, because it did not occur on the two preceding voyages.

voyages. An account of it shall be inserted at the end of next month's Review. I call it a catarrhous fever.

All the diseases of the month were: three cases of remitting sever, which were mild; six of slight sever; seven of catarrhous sever; one of intermitting sever; one of diarrhoea; one of cough; one of scurvy; two of rheumatism; one of hemorrhois; one of eruptions; one of weakness; one of nephritis; sive of contusion; one of strain; two of inslammation; one of abscess; and three of ulcer.

I prescribed for the severish indispositions as already mentioned; and for the chirurgical patients, after the manner stated for contusion in January 1772, excepting cases of abscess and ulcer; the last of which will be noticed hereafter. Concerning an abscess I need say nothing. The hemorrhoids were cured by keeping the body open with a common purging electuary, to which sloss sulph. was added, after giving a smart purge; by somentations, and anointing the parts with an emollient sulphur ointment.

The fcurvy appeared in the patient's ankle a few days after we failed; the cause of which proceeded, most probably, from his having sprained it by being put in irons when drunk a little time before. He soon became exceedingly bad, being scarcely able to stand with the help of crutches. I ordered him lime juice with wine and sugar twice a day,

a day, and a proper regimen \*. He recovered in a great measure on board, but not perfectly.

### JANUARY 1774.

The fick lift varied little, though it rather decreased all the month. In the beginning a few catarrhous fevers were admitted, which were succeeded by bilious complaints. The patients in all were: three with remitting fever, one of them only was bad; seven with slight fever; four with catarrhous fever; one with belly-ach; one with contusion; one with inflammation; and two lame. I prescribed for the bilious complaints as in February 1772.

## The Catarrhous Fever described.

The catarrhous fever attacked both young and old; and it was remarkable, that it was most favourable to those who were first affected with it, and towards its declension. What were its procatarctic, or proximate causes, I do not perfectly know. I have mentioned in the Journal, the 23d of February 1772, that the Weasel's men were seized with catarrhous complaints whilst they lay off Senegal, in very foggy weather, which probably was the cause of them: but in the Rainbow, the fever commenced at Teneriss, and disappeared

\* See Part V. chap. i. § 5.

whilst

whilst we lay off Senegal, in very indifferent weather.

In fome patients this fever began with fwelling, and pain in one fide of the face and throat\*; but generally the whole face and throat was swelled. The swelling seemed to be seated in the glands; but it was not remarkably hard. The uvula, tonfils, and fublingual glands were enlarged and redder than natural. The patient was feverish, the fwelling was painful, and at night there was an exacerbation. About the third day, the fwelling was much increased, the whole head being affected. They spoke with pain, deglutition was difficult, and the fever with thirst was more considerable. The fixth day, the fwelling, pain, and fever, were much abated; but they still had pain in swallowing. They complained of an offensive taste and smell in their mouths and throats, although I never perceived in them an abfcefs, or an ulcer.

Most of them recovered in eight days, a few fooner; one recovered on the 11th, and one was afterwards seized with cough and a very bad fever t.

The crifis of this fever was a copious perspiration about the throat, a falivation, and the offenfive taste and smell already mentioned.

<sup>\*</sup> Could this fever be denominated angina parotidæa, or mumps? If this be the case, I never saw the mumps in so regular and bad a form; nor so epidemic.

<sup>†</sup> See case 15th of the fever, Part V.

From most of the patients I took a little blood, which was somewhat sizy, and next day ordered a purge of salts. The salts were repeated as occafion required, especially when the bad taste and smell were perceived. I afterwards ordered the saline mixture with Huxham's essence of antimony—from sisteen to forty drops—every six hours; allowed them sage tea or barley water for drink; made them gargle frequently, with decost. salv. mel. Britan. & acet. distil.; embrocated the parts with volatile liniment; covered them with slannel; and ordered them a light diet.

### FEBRUARY 1774.

The patients were not numerous this month, and had chiefly bilious indifpositions, which most probably proceeded from eating unripe plantains, bananas, fresh fish, and from the hot weather. I ordered such medicines for them as I have already mentioned in February 1772.

Two cases of remitting sever occurred. One of the patients who had been in the sick list not long before, with a bilious complaint, had it savourably; the other died of it.

Though it is faid he died of remitting fever, strictly speaking it should be called anomalous; because the symptoms were neither pathoguomonic of sever, nor of dysentery, as appears in the sollowing month's Review.

The fick lift decreased until the 10th of the month,

month, and then increased to the end. All the diseases were: two cases of remitting sever; fix of slight sever; four of diarrhæa; one of belly-ach; one of cough; one of hypochondriasis; one of piles; two of eruption; one of scrophula; one of strain; two of contusion; one of ulcer; and one of lameness.

### MARCH 1774.

The ship's company was remarkably healthy all the month, which I may again venture to fay was principally owing to the tincture of bark having been administered to the people who were employed on shore duty, after the same manner as on the preceding voyage. This circumstance deserves the more particular attention, because they had not the advantage of getting any fresh stock, when the ship was at the Cape de Verd Islands, as theyhad had the two preceding voyages. Another circumstance is worthy of notice—the marine, one of the wooding party, who got drunk, and lay in the woods one night, and amongst the blacks the following night, at Sierra Leon, as remarked in the Journal, never had the least ailment, from my having taken the precaution to give him the bark, after a vomit and purge.

The fick lift continued to decrease until the 24th of the month, when a few slight ailments were added to it. The ophthalmia remitted, and after vomiting and purging the patient, it was carried off by the bark. The old scorbutic patient recovered

recovered very much, from being fent on shore at Sierra Leon and Cape Coast every day, though he was a dirty indolent wretch. The man with hypochondriasis \* grew worse, and was so obstinate that he would take no medicines. I prescribed for the other diseases as in preceding months. The man with the sistual in ano had a draining from an old incision, which had been made in an abscess. His body was kept open, and dressings applied to the part.

In all were added to the fick lift: four with flight fever; one with diarrhea; one with ophthalmia; fome flight ophthalmic complaints; one with excoriation; and one with old fiftula in ano. The patient whose case was anomalous died the 6th of the month.

## The Anomalous Case.

William Macartney, feaman, aged about fifty-fix years, after having been ailing a month, while we lay at Sierra Leon, on the 24th of February, complained of purging with fevere gripes, of puking, head-ach, thirst, great weakness, and universal pains with slight fever. His countenance was sallow. I ordered fifteen grains of ipecacuan, and an opiate at bed time, with barley water for his drink.

2d Day

<sup>\*</sup> This poor man was the officer of marines, and was lunatic. But out of delicacy, I called his disease by this name. He never recovered his reason. I understood afterwards that it was brought on by an abuse of hydrargyrus.

2d Day of complaining, there was no alteration: I prescribed two scruples of rhubarb. P. m. he was griped all the day, and had only one stool. An emollient clyster was therefore administered, and the opiate—half a grain, repeated at night.

3d, He had a bad night; from conftant gripes and a fruitless desire of going to stool. I ordered pulv. ipecacuan. gr. v.; tinct. heb. gut. vi. in a little water and syrup thrice a day. P. m. he found himself easier, and his thirst less, though his medicine had only puked him. The clyster and anodyne were repeated. I allowed him a little wine.

4th, He passed a restless night, and was not relieved, though he had had several copious stools: I repeated the rhubarb, anodyne, and wine. P. m. he had several stools; was very weak, and much depressed, had no appetite, and his gripes with the febrile symptoms continued.

5th, He was not better. I found he had long been subject to complaints in his bowels, from dry belly-ach, which he formerly had in the West Indies. A. m. I ordered him two of the following pills, with plenty of demulcent drink, (June 1773) and the opiate at night. R. pulv. r. rhei. 3i.; tart. emet. gr. iv.; sapon. ven. gr. viii.; tinct. thebaic. gut. xxxvi. syr. simp. to make a mass to be divided into twelve pills. A. m. he had no stool: the clyster was repeated.

6th, He

6th, He rested better. He had one stool from his clyster. The abdomen was swelled and tense, and the sebricula still continued: I repeated the pills, and ordered the abdomen to be well somented, which relieved him. P. m. his countenance was ghastly. I prescribed camphor gr. vi. and gave him the wine and opiate.

7th, He passed a bad night; dozed with his eyes half open, and was in no respect better, though he had two copious stools in the night. P. m. he was no easier. I repeated the pills, and gave him ten grains of camphor, with the anodyne and wine.

Sth, He had feveral stools in the night; the swelling and tension of the abdomen were, however, very troublesome. I ordered his medicines, wine, and drink to be continued. P. m. his body was lax.

9th, The abdomen was more diffended and hard, though not conflipated, nor had he any obstruction of urine. His pulse was very small, his skin was only moderately warm, yet his thirst was infatiable. I prescribed as before.

10th, He had a very reftless night: the abdomen was painful upon being touched; and he was feized with bilious vomitings, and hiccup. P. m. as he had only one stool, I ordered the clyster to be repeated, and the medicines and wine to be continued.

VOL. I. Y 11th,

11th, He was extremely reftless in the night, and the swelling and tension of the abdomen increased. I prescribed only wine. P. m. he had two copious stools in no wise putrid, and died at four o'clock\*.

#### APRIL 1774.

The first day of the month, a malignant dysentery made its appearance amongst the marines, who were the greatest sufferers, as well as by the dysentery of the preceding voyage. Several of the feamen were attacked with fcurvy; a few with bilious indispositions; and two with remitting fevers, of which one was mild. In all thirteen cases of dyfentery; one of diarrhœa; two of belly-ach; two of remitting fever; two of nausea; one of headach; four of fcurvy; one of rheumatifin; and one of excoriation occurred. As we therefore had a very quick transition from a healthy to a fickly state, I beg leave to offer the following queries. and shall leave it to the reader to judge whether they express the real causes of this change or not.

Could our long inactive fituation off Senegal, in

<sup>\*</sup> I am now satisfied, though I was formerly of a different opinion, that this man's case was visceral, but not dysentry; that the febricula was symptomatic only—and therefore was strictly cachexia—as it will be considered in the table.

fo impure an atmosphere\*; without fresh meat and vegetables; our not getting any fresh stock at the Cape de Verd Islands; and the men's intemperance while the ship lay at Cape Coast, be considered sufficient causes of the sickly change?

Could the two last days of March, which were very wet, especially the 31st, become sufficient proximate or immediate exciting causes of it?

It is true a boat came on board of us twice, on the 31st of March, from the whale fishing vessel, with the master, who was bad of tertian sever of a mild form; but as the rest of the men were well, it can hardly be supposed that a dysenteric infection was contracted from him. Besides, the marine who first complained of dysentery, was taken ill the 31st of March. But allowing that a malignant dysentery could have originated from a mild tertian sever, which is by no means probable, is it to be supposed, that the infection would have operated so powerfully as to produce an instantaneous action? I certainly think not.

On the preceding voyage the flux did not appear on the passage from the coast of Africa to Jamaica, notwithstanding all the heavy rains: but all the previous concurring circumstances which we met with on the last voyage had not then occurred. The men too were undoubtedly intemperate the former voyages, when the ship was at Cape Coast; but they were much more so the last voyage \*.

Whether there was any secret insluence in the constitution of the air to induce dysentery the last voyage, I will not presume to say, nor offer any hypothesis on the subject. I have stated all the obvious sacts concerning it; and leave every person to form his own judgment of the matter; acknowledging that I am no admirer of hypotheses, however specious, in the practice of physic. They may indeed show the ingenuity of the author, but are never, in my opinion, useful in practice.

The dyfentery we are now speaking of ran more speedily through its different stages than that which occurred the preceding voyage; consequently it was sooner terminated. Three marines and the ship's barber died.

For the description of the dysentery, and manner in which it was treated, see Part V. ch. ii. I prefcribed for the other diseases as I had done in former months.

<sup>\*</sup> Besides, we are quite ignorant, I believe, why causes, to all appearance similar, shall one year, or one season, produce one effect; and another year produce a different effect on the human system. This thought I shall enlarge upon in a future part of the work.

### MAY 1774.

Five fick were left at Antigua Hospital. The list increased all the month, of which the diseases were various, though not a patient complained of dysentery before the 15th day; after which a few very bad cases of flux were admitted. Most of them were sent to Port Royal Hospital, where our own scorbutic men were infected, from the same cause that they were the preceding voyage.

The fcurvy continued to prevail amongst the seamen until we arrived at Port Royal. The cases, however, were not numerous even then, nor were any of them bad, except those of the patients who had ulcers, which became very foul and trouble-some.

The remitting fevers were chiefly mild; but a few of the convalescents relapsed, as did one man with head-ach, which remitted; and he continued long weak. The bilious complaints were mostly added about the end of the month, after the people had got new run.

All the diseases of the month were: eight cases of remitting sever, chiefly mild; two of slight sever; three of head-ach; eight of dysentery; one of diarrhæa; one of belly-ach; six of scurvy; one of cough; one of mortification, with eruption; one of scald; one of contusion; one of lameness; and four of scorbutic ulcer.

In preceding months, I have mentioned in what manner I prescribed for similar cases; but I shall here add a few remarks concerning scurvy, and then relate the case of mortification at length.

### Some Remarks on the Scurvy.

Amongst the scorbutic patients during the second and last voyage, for there were none the first, no unusual symptoms appeared, that is to say, no other than those already mentioned in the Synopsis, page 24, 25, 26, and 27. And those mentioned by the indefatigable Doctor Lind, in his most elaborate treatise on that disease. It would therefore be needless for me to repeat them here, or to insert any particular case, as little, I believe, can be added to that history, or to the method which he has laid down for curing it, in the third edition of his book. Besides, in the sequel of the work I may have occasion to say a few words more on the subject.

All that I shall therefore say on this head at prefent is, that the scorbutic people on board the Rainbow were treated, whilst the ship was at sea, as nearly as circumstances would admit, after the judicious method which Dr. Lind has laid down; that none of them were perfectly recovered when we arrived at Jamaica; and that they were sent to Port Royal Hospital, where they had fresh meat with plenty of vegetables and fruit. And surther, that on the last voyage I selected three patients whose cases were nearly similar, for an experiment to be made with different medicines. The three were upon the same regimen, and had each of them a pint of wine daily. To the patient who was oldest, and rather the worst, I gave twice a day, one ounce of lime juice, and two ounces of wine mixed and sweetened with coarse brown sugar. To the youngest of the three, I gave the elixir of vitriol twice a day in water, in such quantity as not to gripe him. For the other patient who was elderly, and the second in illness, I ordered an ounce of the Peruvian bark in powder every day, mixed with water only.

The medicines were regularly administered for a week, at the end of which it was evident that the man who had taken the bark was most relieved; for he complained then of weakness only, so much he found himself recovered. Next to him, the old man who had taken the lime juice mixture was most relieved. But I could observe no alteration for the better on the man who took the elixir of vitriol.

Before I quit the fubject, I must be gleave to add another remark, which may not be unworthy of attention. It is certain, that a few cases cannot present the practitioner, or reader, with all the various symptoms, which are necessary to compose the history of a disease; because an history should be compiled from a greater number of cases, than can possibly fall under the observation of one v 4

practitioner. Therefore, though the pathognomonic, or general fymptoms, will indicate the difease to an old practitioner; yet it is more than probable, when only a few cases happen to come under the care of a young practitioner, which do not present all the various symptoms that are set in the in the history of a disease, with which he is by acquainted from reading, that this is the great deal of his being puzzled in distinguishing the dease, and in treating his patients properly.

I fay, that the pathognomonic fymptoms will generally indicate what the difease is, because sometimes a case is so complex, as to bassle the fagacity and discernment of the most experienced physician to investigate it. When this happens, all that can possibly be done, I apprehend, is to subdue the most alarming symptoms, in succession, until the disease is either perfectly cured, or assumes its proper type.

What led me to this reflection, was the recollection of a fcorbutic patient's cafe, accompanied with unufual fymptoms, on board his Majesty's sloop Ferret, in the bay of Mexico, in the year 1766. On a very short cruife from Pensacola, (after the ship's company had been a long time without fresh meat or vegetables,) in that bay, we had extremely bad weather, during which the people got wet and greatly satigued. The scurvy soon after made its appearance, a number fell down with it, and it was very rapid in its progress.

Having

Having unfortunately loft my day-book, I cannot furnish a particular description of the case; but I remember well, that it nearly correfponded with the uncommon appearance (of an univerfal dropfy) which it assumed in the East Indies, on board of his Majesty's squadron in the late war, as described in Dr. Lind's Treatise \*. This appearance I had neither heard of, nor feen; notwithstanding I had feen the scurvy in all its stages, on board of his Majesty's ship Prince of Orange, on a cruise in the bay, after the reduction of Belle Isle, when we had above a hundred men bad of it; but fortunately only one died. I was fo much puzzled with the case, that I consulted Dr. Lorimer † at Penfacola on it, and by his advice I made repeatedly feveral punctures with a lancet in the fcrotum, which was greatly diftended, as well as the whole body, when the difease was in an advanced state, and treated the patient in every respect as if his disease had been an anasarca; but he died foon after I left the Ferret. At that time, neither I nor Dr. Lorimer suspected the case to be fcorbutic.

None of the Ferret's men died except that poor man, although feveral of them were in the last

<sup>\*</sup> See p. 278, of the third edition..

<sup>†</sup> This gentleman is yet Surgeon General of the province of West Florida, and remarkable for his knowledge of mathematics, as well as eminent in his profession.

stage of the disease before they were got on shore. But they were certainly indebted for their recovery to the humanity of Governor Johnston, and Captain Murray, who commanded the vessel. The one generously spared his country house for an hospital, and gave the men salad every day: and the other liberally gave them wine in such quantities as I thought proper.

# The Case of the Gangrene or Mortification.

CHARLES DUPLASSEY, butcher, an old man, much given to drinking, was fubject to the gout, and gravelish complaints, with suppression of urine; of which the last generally followed intemperance, and was carried off by gentle cathartics, diuretics, and pediluvium. On the evening of the 9th of May, he complained of suppression of urine, and of great pain about the penis. Upon examination, I found both the penis and fcrotum much fwelled, and apparently inflated, though not emphysematous, which I supposed was the consequence of the fuppression, and upon inquiring he acknowledged that this had been the cafe for fome time. I ordered him a strong decoction of rad. alth. and sal. nitr. with fugar, to be drank frequently; the parts to be fomented and fuspended, and also pediluvium. The medicine operated by stool and urine, but not freely.

Next

1774.]

Next evening he complained of flatulencies in his bowels, and flight retching at times. The inflated-like tumefaction did not fubfide, nor was his pain leffened.

On the morning of the 11th, I was astonished to fee the scrotum in a state of mortification. The pubes appeared red and very painful; the spermatic cords were much enlarged, tenfe, and exceedingly painful, as were the penis and fcrotum, upon being handled very gently. The pain afcended gradually towards the abdomen. His pulse was languid, and he had frequent cold clammy fweats on him. I added spirit of wine to the fomentation. and dreffed the parts with hot digeftives. I ordered him the bark in equal parts of red port and water, as often as his ftomach would receive it. He took to the quantity of a drachm and a half of the bark every hour at least, with thirty drops of the sp. nitr. dulc. at times; but towards night the mortification had feized the prepuce which was very large and the penis was become emphysematous. made little water, and had no appetite from the time of his first complaining. He was now troubled with hiccup; and his pulse was very weak and irregular.

In the morning of the 12th his extremities became cold, with cold clammy fweat over him; he was now infenfible; his breathing was laborious; the pulfe became very weak and fluttered before he died at 9 a.m. The mortification externally did

about him before death was excessively offensive \*.

\*\*Decry\_

\* After he died; I was informed +, " that he was very " drunk the afternoon of the 7th, and had lain with a black " woman that night, who had blown him; and that he was " taken ill the next morning, the pain and swelling about the egenitals having then begun, though he did not complain." What was meant by his having been blown by the woman I was ignorant; but hearing there was a man in the ship who had formerly received such an injury from a prostitute, I sent for him to ask some questions on the subject. The man said, "he had " seen the butcher's condition the morning after he had laim "with the black woman, and told him what the matter " was with him. He likewise said he had been served the " same way by a girl; for which he was sent to an hospital, " where he once was all cut and recovered; having told the " surgeon by what means it happened." But this was a young healthy man. He added, "that the manner in which the " whore served him the trick he could not tell, for he perceiv-" ed no unusual circumstance or action of hers in their copu-"lation." He added, however, " that he was certain she " knew of her having served him so, because she ran away as " soon as she got out of bed, and never came near him again; " and he supposed that she had served him so for beating her " before they went to-bed; that the butcher had beat his black "girl before they went to bed, and she likewise went on share: "as soon as she got up in the morning, and never returned " again."

I received this information too late to make any experiment in the butcher's case. But if I had known it sooner, I am doubtful whether I could have been the means of preserving

<sup>†</sup> I have no great faith in the following relation, which is inserted as the manner that I had it; only because I thought it curious.

Query, Might not the people's intemperance at Antigua and St. Kitt's; the heavy rains of the 19th and 20th of the month, to which they were exposed; and their intemperate use of new rum, of vegetables and fruit, immediately after at Jamaica, be the exciting causes of the dysentery reappearing, as well as of the bilious complaints? And may not the same queries as were stated in May 1773, respecting the possibility of preventing sickness on board the ships which touch there from Africa, from becoming so epidemic, or of rendering it

his life, considering his age, bad constitution, and his delay to complain after he found kimself so bad. It would appear, however, that some prestitutes only have this infernal art of blowing a man, as the seamen term it, in the act of coition. My mate said, he had seen numbers of such cases, but he mever once suspected it to be the butcher's case, nor mentioned at until I told him what the young man said. I could not col-Rect any information from him that was satisfactory about the matter; neither could some eminent physicians, whom I afterwards consulted, give me any, notwithstanding they had had some cases of the same kind under their care in the course of their practice. As for my own part, I still confess myself perfeetly ignorant of it; but if it really be in the power of a prostitute to commit so hellish a trick, I think it very providential that so few of them know the art of doing it, otherwise I may venture to say, that they would treat men in that abominable manner for very slight offences. I think it very possible, however, that a woman, by pinching or squeezing a man's testicles in the act of copulation, when he is in liquor, with a design to hurt him, may bring on an inflammation in the parts, and all its consequences.

less malignant, be stated here with equal force and propriety? I think so. Some of the men died of it at the hospital.

#### JUNE 1774.

The patients were very few this month, and their complaints were the evident effects of intemperance and indifcretion. Four were admitted the first day; one now and then until the middle; afterwards they were more frequent. None of them were dangerously ill except the patient with remitting fever, which he brought on by fatigue and exposing himself improperly to the fun: he was fent to fick quarters the third day of his illness \*: most of the other patients were fent to the hospital. The few who remained on board were treated as fuch patients had been in former months. The cases in all were: three of dysentery; one of diarrhœa; one of remitting fever; three of flight fever; one of headach; one of scurvy; one hectic; one of contufion; one of lameness; one of wound; and one of ulcer.

The patient affected with fcurvy was the marine, who was so dangerously ill after catarrhous fever; and the only marine who had the scurvy in the three voyages.

JULY

<sup>\*</sup> See the last case of the remitting fever, Part V.

### July 1774.

The patients of this month were still fewer than those of the last, unless we include the men who returned from the hospital, and were added to the sick list, and the seven invalids. The patients who came from the hospital were: four scorbutic men with flux; one with epilepsy, who was sent for dysentery; one with dysentery; one convalescent flux patient; one with scrophula; and one with contusion. The invalids were: one blind of an eye; one with gout; one with obstructions in the abdomen, after a remitting sever; one with headach, from an old fracture of the cranium; one with a very large foul ulcer; and two with chronic flux; most of whom were much recovered by the medicines prescribed in similar cases.

One of the men ill of scorbutic flux, who returned from the hospital, was seized on the 20th with nervous sever: his case shall be described at the end of the Review of August. The case of contusion I discovered to be a fracture of the head of the os semoris, but I could then be of no real service to the man. The case happened when I was on shore, and neither my mate, when he sent him, nor the surgeons at the hospital, suspected it. Epithems and regimen were all that I could prescribe for him. The scrophulous arm was laid open at the hospital, and was excessively troublesome and painful to the

poor

poor man, who was greatly reduced by dyfentery, which attacked him there; and continued to harafs him, in spite of every method that I could think of to remove it. Applications were of very little benefit to his arm. The epilepfy continued as obstinate as it had been at the hospital, where he faid he got it by a fright one night in bed. Evacuations, blifters, gum pills, volatiles, opiates, bark, and the cold bath, in the manner they were tried on shore, and repeated on board, were unfuccessful. The fit always occurred in the night. At times he escaped having a fit for one night; and sometimes he had a slight fit; but these were uncertain, and feldom. As I did not fee him until he had been bad a confiderable time, I think it needless to insert a part of his case.

There was nothing particular in any of the cases on board, which were: four of slight fever; one of head-ach; one of nausea; two of belly-ach; one of slow nervous fever; one of epileps; one of contusion; one of fracture, discovered; and two lame patients. The old patient with hypochondrias continued very obstinate, and would take no medicine.

### August 1774.

The weather being rainy, the fick lift increased until the 26th of the month, and afterwards decreased. As we daily raised our latitude, the weather became colder, especially towards the latter

end

The

end of the month. The difeases consequently proceeded from that cause, many of the people being ill provided for cold weather, which is generally the case with seamen after leaving a hot climate, as I have already observed. However, the patients were not numerous; the physical cases were all relapses, and one of the intermittent patients was an invalid; fome of the cases of rheumatism were relapses, and the other patients were subject to it, except those added the two last days; there were few in the lift when we arrived in England, unless we include the invalids who were wonderfully recovered. The man with the blind eye; the one with the large foul ulcer; and the man with obstructions of the abdomen recovered. The case of obstructions was cured by purges of jalap and calomel, frequently repeated, and in the intervals pills made of foap and emetic tartar, and a light diet with wine.

All the patients added to the fick lift were: one with remitting fever; three with intermitting fever, one of whom was an invalid; one with flight fever; one with head-ach; one with belly-ach; five with rheumatifm; four with contufion; one with feald; and one with wound.

I prescribed for them as I had hitherto done for similar cases.

The man who had nervous fever last month, returned to his duty on the 14th instant, quite well. His case was as follows:

VOL. I. Z

## The Case of the slow Nervous Fever.

CHARLES BURTON, feaman, aged about 28, of an effeminate disposition, complained the 10th of May ult. of scorbutic symptoms, for which he was sent to Port Royal Hospital the 22d, where he had a slight attack of dysentery, and continued there until we sailed from Jamaica. A considerable time after he came on board he was feeble, and was troubled with cough, notwithstanding he took medicines, and was under proper regimen. He complained the 19th of July that he had had a purging on him for three days, although he did not mention it, for which I ordered him then three doses of ipecacuan. each five grains, and an anodyne at night.

On the 20th of July, latitude observed at noon 18° 58" N. his purging was abated, but he complained of unusual weakness, heat, and thirst. P. m. he was very peevish, his pulse was quick, and his skin hot. I prescribed two scruples of rhubarb, and thin gruel.

2d, He had an indifferent night; he frequently belched up mouthfuls of ill tafted ftuff; he was fomewhat deaf, and returned indiffinct answers; he craved; his checks were flushed; and his pulse was irregular and quicker than natural. I gave him ten grains of ipecacuan, and allowed him a little wine.

3d, He

Sd, He complained constantly of ill taste, and clamminess in his mouth, which gave him great anxiety; his tongue in the middle was of a pomegranate colour, furrounded with a black line, and the edge clean; he was much troubled with giddiness; had frequent loose stools, constant tremors, an inordinate craving, a continual thirst, and great weakness. I ordered him the faline mixture made with the fal. c. c. wherein the falt predominated; with the addition of tinct. theb.\* and red port; a nourishing diet with wine, and a slice of China orange, sprinkled with sugar, to suck occasionally.

4th, His tongue was clean; he complained less of heat, and his pulse was not so quick. In other respects he was the same; and seemed to sleep more than he knew or would allow. I continued his medicines and diet.

5th, The diarrhœa was still troublesome; and a prickly heat like eruption appeared about his neck and breast. I prescribed ten grains of rhubarb, and two grains of ipecacuan. A. m. the powder puked him gently, and gave him several stools. P. m. his pulse was more regular, and his skin cool; but his tongue was dry: he sighed deeply when he spoke; and preserved lying on a chest rather than in his hammock.

I ordered him ten grains of compound powder of contraverva every eight hours, besides the me-

<sup>\*</sup> In each dose were six drops of the tincture.

dicines every four hours, as prescribed on the 3d, with his wine and diet. By accident I learned that he had been somewhat delirious on the nights of the 19th, 20th, and 21st of July, but not afterwards.

6th, He was quiet in the night, and fweated profufely; his tongue was much cleaner; and he complained only of weakness. However, the bad taste of his mouth, thirst, purging, tremors, giddiness, inordinate craving, deafness, and the slushing, with wildness of countenance continued. His urine was high coloured. I still repeated all his medicines, continued his wine, and frequently gave him, without his asking for any thing, a little sago, panada, or toast with wine, cinnamon, and sugar added to them.

7th, He was more peevish, being now tired of every thing he was fond of before. I ordered all his medicines, wine and diet, to be continued.

Sth, He was weak and faintish; his pulse was very unequal; his mouth was dry and clammy; his skin was hot, with a disagreeable moisture on it; though he complained of nothing except his purging, and that his stools were small. I prescribed as before, and tinct. theb. gut. xv. to be given him at night; and likewise a large blister to be applied between his shoulders.

9th, He rested well, but denied that he had slept. At noon his pulse was very small; his skin was cold; and he had a clammy sweat over him.

He muttered; fpake inarticulately; did not ask for any thing; and frequently dozed, but would not acknowledge it. I repeated the contrayerva powder, with five grains of theriac. androm. every fix hours; and gave him a large spoonful of the following julep every two hours. Four ounces of tinct. ferp. virg.; a drachm and an half of vol. aromat. spirit.; half a pint of simple water, sweetened to the palate. I applied large blisters to the internal parts of his thighs, and continued his wine diet. P. m. he had one stool, and seemed better, but he felt no pain, though his blisters acted properly.

10th, He rested very well, apparently, in the night. His pulse was more regular, his skin was moist, and moderately warm; his purging was abated, and he complained of his blisters being painful. I omitted the theriac, and julep, but continued the contrayerva as before, and repeated the following draught every hour: Huxham's tincture of bark, and snake root tincture, each one drachm, in an ounce of simple water sweetened with sugar. He also continued his wine diet.

11th, He was easy, but did not sleep in the night. He was still feverish, and his tongue was dry, though he complained of weakness only, and was hungry. I ordered him the decoction of bark with wine, and his diet to be continued. P.m. he had one stool in the day only; was in good spirits; and in every respect better.

12th, He paffed a good night; complained much of the blifters in the day; and of great weakness. His tongue was moift, and he had very little fever. I repeated the decoction and diet.

13th, He was a little feverish, and took the decoction in the forenoon. P. m. he had no fever on him, and complained only of tremors from his weakness.

14th, He was much better, and took the decoction with the wine every hour regularly, and his diet.

15th, 16th, 17th, 18th, and 19th, He continued to recover. I prescribed as on the 11th.

20th, He took the decoction every two hours only.

On the 21st, he took it four times; and afterwards morning and evening, until the 26th day of the fever, when he returned to his duty quite well.

Six men died on the voyage; viz. the patient whose case was anomalous; four of dysentery; and an old man of mortification.

### CHAPTER IV.

The Table of the Difeases on board his Majesty's Ship Rainbow, in 1771-2, 1773, and 1774, on the Coast of Africa and in the West Indies, with the Number of Deaths of each Difease.

No. of Diseases	Diseases.	No. of Deaths.	Remarks.
62	Remittent fever, including two anomalous cases	2	The anomalous cases only.
11	Intermittent ditto		
	Slight ditto in hot climates		
	Slight ditto in cold ditto		
	Nervous ditto Catarrhous ditto		
	Cachexia—morbid viscera	1	Formarla ganaidared anomalaus
	Weak		Formerly considered anomalous.
	Eruption		
2	Erysipelas		
30	Scurvy-including those with scorbutic ulcer		
1	Scrophula		
	Gout		
	Rheumatism Dysentery		Many man relations
	Belly-ach	9	Many were relapsed cases.
	Diarrhœa	-	
	Quinsy		
4	Ditto, slight		
1	Hæmoptysis	1	The boy; a singular case.
	Hæmorrhage		
	Hectic		
	Cough Asthma		
	Vomica'	1	Very singular case.
	Hypochondriasis	1	Was a case of lunacy.
	Epilepsy		, , , , , , , , , , , , , , , , , , , ,
	Ophthalmia		
	Dimness of sight		
	Suffusion		
	Deafness Nephritis		
	Hæmorrhois	}	
	Contusion		
	Strain		
1	Inflammation		
	Guinea worm		
	Parotis		
	Abscess Wounds		
	Excoriation		
	Scald		
1		1	
	Fistula in ano		
9	Ulcer		
21	Lame—slight complaints		
	Fractures Accidents		One fell from the most bandance
2	Accidents	2	One fell from the mast-head upon deck, and the other down from the
673		17	ship's side into the dock.

#### CHAPTER V.

On the Means of preventing Sickness on the Coast of Africa.

FROM what has been faid, it appears that although remittent fever prevailed on board the Rainbow twice on the first voyage, after leaving Sierra Leon and St. Thomas's, it could not be faid to be epidemic; because, excepting one case, those only were affected with it who, having been employed and flept on fhore, were exposed to marsh effluvia. The same remark applies to the fever on board the Weafel, in 1769; for all the gentlemen, and most part of the ship's company, having been on shore at Gambia, wading in the marshes, besides being under the influence of the marsh effluvia, which were continually efcaping, with the rains and heavy dews while we lay in that river, were in a peculiar manner exposed to their noxious effects. And it is a question, which cannot now be solved, whether, if we had not gone on shore at Gambia, any more of the people or gentlemen, than those employed in wooding and watering the ship, would, notwithflanding the rains, have been affected with fever, as happened to the people thus employed on board the Rainbow? Our people were not affected with fever. fever, in March 1773, notwithstanding the heavy rains and calms which we had at fea, and at no great distance from the coast of Africa. There indeed we were beyond the reach of the baneful effects of the marsh effluvia. But the men were frequently exposed to the effects of cold and moisture in the tornados, in shortening fail; and the thermometer always funk confiderably on the approach of, and during a tornado. Nor was the health of our men affected by cold foggy weather, in January 1774, off Senegal, where we lay above three weeks. The cold wet fogs on the banks of Newfoundland, in fummer or winter, never, to my knowledge, give rife to, or occasion, remittent fevers. In marsh effluvia, therefore, which never fail to bring on remittent fever, a matter extremely noxious to human life is contained, and acts certainly upon it, unless some means are taken to prevent it. The matter involved in moist and cold, or in moist and hot air, whether acid or alkali, seems to be a compound of animal and vegetable bodies, and is highly volatile. What quantity of vegetables, fish, infects, or other animals entangled in swamps and marshes, and which there become putrid, are requifite to form the poisonous exhalations; or in what manner the effluvia, when formed and brought in contact with the body, act upon the fystem, when inhaled into the lungs, to produce the morbid change from health to remittent fever, it is impossible to determine. Suppressed perspiration does does not feem to be a necessary agent in producing the change. It may be occasioned by cold air alone. It is not given us to know to the Arcana Dei. It is quite sufficient for us, if our knowledge enable us to shun and prevent these fatal effects of such causes. But a preventive of remittent sever in hot climates may be thought a discovery, or subject, too trivial to merit much attention from any except those employed or concerned in such climates. The preservation of the health of our fellow creatures, in any situation, however, and more especially of the health of those who are employed on public service for the benefit of every individual of the state, is certainly a duty incumbent on us all.

Notwithstanding this truism, Dr. Lind \* was the only professional person, before the author, who could be said to have laboured strenuously or successfully for that purpose. Indeed all his writings are calculated for the preservation of the health of seamen; though too little regard has been paid to it by surgeons and others. He very judiciously "condemns the dangerous practice of suffering men to sleep on shore in the sickly parts of Africa; especially in the rainy seasons." Yet though the satal effects of suffering it were often and woefully experienced on boards his Majesty's ships, and in others, his admonitions, I must say, were but little attended to.

Without

<sup>\*</sup> Dr. Lind of Haslar is here meant.

Without fuffering men to fleep on fhore on the beaches, there is too much danger of their incurring fickness by doing the duty in the day. Befides, as very little time is employed in landing them a.m. and taking them off p.m. the fervice will be forwarded by doing fo. What an abominable unhealthy place St. Thomas's is for Europeans to stay ashore on, appears from upwards of fifty men fleeping on fhore one night, the night the tornado happened, in a house with several large fires; and yet few of them escaped the remittent fever: this deferves the particular attention of those who touch there. Apprehending then the danger those men would incur from having been unavoidably on shore; and imagining a large dose of tincture of bark might be comfortable to them, if not a preventive from fickness, I sent for that purpose, next morning early, a dose of it for each man, which was administered in a glass of Captain Collingwood's wine. No perfon could have expressed more concern for their situation, and for his not having been able to prevent their being on shore all night, than he did. When they came on board many of them were exceedingly dejected and complained; but they were unanimously of opinion, that the tincture of bark and wine had been of very great fervice to them.

Reflecting on this circumstance I was impressed with the idea of forming the plan of administering bark and wine in future to the people that might be fent on shore duty, on the coast of Africa, as a preventive of fever, and of urging in the strongest manner the propriety and necessity of not suffering any of the men to sleep on shore.

Accordingly, on our fecond voyage, being fully provided with the means, I communicated to Capt. Collingwood my intention to make the experiment. At the fame time I intimated to him the propriety of having the experiment also made on board the Dispatch sloop in company with us; and solicited his affistance as far as it might be found necessary on the present occasion; and in extending the plan still further hereafter, if it should prove successful on board the Rainbow and Dispatch; which he very readily promised, and afterwards performed.

The plan having been followed up, and proving fuccessful on board both ships, Captain Collingwood made it known, by transmitting all the correspondence and reports on the subject to the Secretary of the Admiralty as soon as we returned to England, together with his own opinion. To which their lordships replied, "that they had sent the papers on the subject to the Commissioners of Sick and Hurt, and desired them to report on them." In consequence of which the Commissioners for Sick and Hurt wrote to me and the surgeon of the Dispatch for an account of our prescription \* and the

<sup>\*</sup> Cort. Peruv. in cras. pulv. lb. vi.; rad. gentian. incis. lb.ij.; rad. serp. virg. cont. lb. j.; vin. alb. cong. xxxij.—and next voyage

the expense—which we complied with; but before I heard from them again our ship sailed.

I therefore followed this voyage the plan as before stated on the last voyage, with the addition subjoined to the prescription in the note. When we returned to England Captain Collingwood again sent my report on the effects of the preventive plan, with the other necessary papers, to the Admiralty: and their lordships replied, that they had ordered the Commissioners for Sick and Hurt to repay the surgeons their expenses for the preventative medicines made use of on both the voyages—which they complied with.

The Commissioners for Sick and Hurt, after having consulted the physicians of the naval hospitals, and several eminent physicians in London, respecting the plan, acquainted the Lords Commissioners of the Admiralty therewith, and that they were unanimously of opinion it would become beneficial to his Majesty's service to adopt Mr. Robertson's plan. But, instead of a tincture of bark, that they would recommend a drachm of the powder of bark to be given in a gill of white wine, every morning and evening, to each man who might be sent on shore duty, on the coast of Africa, as a preventive of sickness. Upon which their Lordships thought proper to order the said plan to be strictly sollowed in suture; and the Commissioners

voyage I added pulv. cr. cort. Peruv. lb. j.; one sixth more of the gentian and serp.; and aurant. parv. exsiccat cont. lb. ij.

for Sick and Hurt to give the necessary directions, from time to time, for that purpose.

Taking a bitter in wine before dinner had been a usual custom, perhaps, time immemorial; and Dr. Lind recommended, in his Essay on the most effectual Means of preserving the Health of Seamen, a bark bitter; but until I made a trial of it, without knowing any thing of the doctor's hint, for I had never seen that valuable book, no public experiment of its essicacy had ever been made, to my knowledge.

Having thus succeeded in perfecting my plan and in getting it introduced into the service, I thought it right to state the subject fully, as an inducement to others\*, in suture, to bring forward plans of public utility.

Having obtained this important object, I endea-voured, by every means in my power, to excite the fociety of naval furgeons, at Portfmouth, to get a general petition fent to the Lords Commissioners of the Admiralty to allow Peruvian bark, at the expense of government, for the use of his Majesty's ships in hot climates. To further this laudable design, I stated to the Commissioners for Sick and Hurt, at the end of my Journal on board the Wea-

<sup>\*</sup> I believe Dr. Trotter was the person by whose means citric acid was furnished to the navy in the late war, at the expense of government; and a very beneficial improvement it is.

fel, the fatal confequences to the fervice which were the refult of my want of that medicine—although I had fupplied myself with more than thrice the quantity sent from Apothecaries' Hall on board the Weasel for foreign service: imputing the loss of most of the lives of those who died to my not having Peruvian bark to administer as liberally as I saw it needful; and therefore, entreating them, for the benefit of the service, to get all his Majesty's ships, employed in hot climates, supplied therewith in the manner they were supplied with elixir of vitriol and James's powder. But unluckily I was ordered to sea before I could bring it to bear; and it was entirely dropped in my abfence \*.

\* In 1796 this plan was taken up in a liberal manner by the Commissioners for Sick and Wounded; and, besides bark, they obtained for the surgeons of the navy, at the expense of government, a gratuitous supply of the most expensive necessary medicines. They also very properly curtailed the old naval invoice of medicines, to the benefit of the service and very much to the interest of the surgeons; whose situation now in the service is greatly improved-nearly after the plan which I pointed out as highly necessary to be adopted for the benefit of the navy, in 1781, in a pamphlet without my name, entituled, A Political View of the Indigent Establishment of the Navy Surgeons: a copy of which was put into the hands of three succeeding First Lords of the Admiralty, and of other men in public situations; but no regard was paid to it until Lord Spencer's administration, when the new arrangement was made, which I have now hinted at.

On the general fubject of prevention from fickness, in addition to the numerous hints which I have already thrown out in the preceding sheets, and will have occasion to throw out hereafter, I would refer the reader to Dr. Lind's works; Dr. Blane's abstract of them, with his own additions, on the preservation of seamen's health; and Dr. Winterbottom's Directions to Navigators and Settlers in Hot Climates; where he will find all that I have said confirmed and enlarged upon.

### PART V.

eases which occurred during several voyages to the coast of africa and the west indies, in the years 1771, 2, 3, and 4.

### CHAPTER I.

Of the Remitting Fever.

#### SECTION I.

## Arrangement of the Subject.

ALTHOUGH it was not my intention to infert a general history of the diseases which fell under my observation on board the Rainbow, yet as the Remitting Fever and Dysentery were the most prevalent and dangerous that occurred, I think it proper to give a more particular account of them, and of the method in which I treated them \*.

I have

\* All the difference which is to be observed between the fever that happened on board the Weasel and the one on board vol. 1. 2 A the

I have already given a very particular account of the Remitting Fever which occurred on board the Weafel; and I may even venture to fay, it is truly valuable; because, as I have already observed, nature was, in a manner, left to follow her own course throughout the fever \*, from my not having a sufficient quantity of bark. But, besides various circumstances which occasioned much difference between the sever in the Weasel and that in the Rainbow, it will be agreeable to the reader to observe what a striking contrast appears between the result of the treatment which speaks more powerfully in favour of the bark, than any eloquence whatever, as it was liberally made use of in curing the latter.

I shall therefore first describe the symptoms of the fever; secondly, offer some observations on it; thirdly, insert the method of cure; and lastly, set down the two anomalous cases which ended fatally; and then a number of the cases—dividing those different heads into Sections. With respect to the description and treatment of the Dysentery, I have nearly followed the same method.

the Rainbow, may fairly be ascribed to the different modes of treatment.

Some remarks on the rheumatism, ulcers, and syphilis, will be added.

\* That is to say, the vis medicatrix naturæ had liberty to act; and a destructive use she made of it. To a man of experience she may be made a very useful handmaid, but is never to be trusted, except in absolute necessity, as was my case.

I shall

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I shall not enter into any detail respecting the different appellations given to remittent sever, according to the different types of its periods. If a practitioner is only careful to watch his patients, and observe attentively the commencement, increase, height, and declension of the paroxysim, with the particular symptoms, so that he may be enabled to prescribe with propriety, I think it will hardly be a matter of much consequence whether he always applies the term Semitertian to the manner of Hossman or to that of Celsus.

Though I do not wish it to be understood that I condemn accurate and nice distinctions, yet I think it right to observe, that a practitioner must be long conversant with the disease, before he can become fufficiently acquainted with the various changes of remittent fever, and be able to comprehend them. Much more difficult will he find it to define and apply those distinctions with precision. Besides, there is fcarcely a physician who, if called to visit a patient in the first paroxysm of remitting fever, can tell with certainty whether it will assume the type of fimple, double, triple, or femitertian, unless he continue with his patient until the period is ended. Even then he will be equally at a lofs to afcertain what appearance the fever will affume next period, because various circumstances may concur to alter its type, from what it was in the first period, admitting no medicine has been given in either. So great is the difficulty of attaining the knowledge of applying fuch diffinctions; not to mention those which the fymptoms create.

In the fubsequent account, I shall therefore retain the term of Remitting Fever, whatever types the periods may assume; because this is perfectly understood by every practitioner without any further explanation. Besides, the explanation may be found in the works of many learned and able physicians; especially in Sir John Pringle's Observations on the Diseases of the Army; Dr. Lind's book on Hot Climates; and in Mr. Cleghorn's Treatise on the Diseases of Minorca, who is remarkably particular on this head.

But instead of observing the diurnal occurrences in the following account, I shall attend more particularly to the periods; to the paroxysms; and the symptoms happening in each of them. Because, though it amounts to one and the same thing, I think I shall in this manner be more clearly understood, which is all I wish.

#### SECTION II.

## The Remitting Fever described.

THE Remitting Fever generally began with chilliness; severe head-ach; sickness at the stomach; and pains in all the bones, but especially in the loins.

But fome drooped feveral days before they thought themselves bad; were chilly, and hot alternately, with rigors, the cold fit continuing twelve hours; fome, without any fensation of chillinefs, were at once feized with burning heat, profuse fweat, and violent head-ach. Together with the general fymptoms, fome were feized with fixed pain in the fide, or breaft, affecting respiration; pains in the shoulders, pains over the eyes; pain and oppression about the præcordia, with wandering pains, and univerfal foreness and uncafiness. Some were feized with nausea; bad taste in the mouth; with vomiting of bilious matter; fevere vomitings and purgings; hæmorrhage at the nofe; watery eyes; head-ach; with univerfal illness; great anxiety and defpondency; fudden giddiness and faintnefs only; and constipated bowels. The skin of fome patients, and the palms of the hands, were excessively hot and dry; and their thirst vehement.

The pulses varied according to the manner in which they were seized; in some cases they were

flow and weak; in fome they were finall and quick; and in others they were quick and full, but not hard.

In these various ways did the fever commence. But if they were at first seized with chilliness or rigors, burning heat, great uneasiness and difficulty of breathing succeeded; and the head-ach and pain of the loins became more violent. Some of their countenances were greatly slusshed; their eyes were much inflamed; the retching was more troublessome; and their thirst intense. Thus they continued, until they were relieved more or less by profuse perspiration. In whatever way they were first seized—except in the anomalous cases to be described—the paroxysm terminated in more or less sweat, which varied much, both as to duration and violence.

In the remission, they all complained of great lassitude and weakness; of pains, and foreness of their bones; of giddiness; and loss of appetite. Their pulses were more languid than in health; and though their skin was now much cooler, the thirst continued. As to the calmness or duration of the remission, it varied amongst them as much as the preceding paroxysm had done. Indeed, to such a degree did they both vary, that not in any two patients were they exactly similar.

Some, after having perfpired a little, which fcarcely alleviated their complaints, continued quite uneafy, until by the next paroxyfm, terminating in profuse perspiration, they were relieved; so that

in a manner they had two paroxyfms before there was a remission.

The fecond paroxyfm, which in fome was preceded by rigors, was in every case more violent than the first. The head-ach and lumbago were particularly vehement; the latter, in fome cases, extended quite round the abdomen, which was painful when touched, and very tenfe. Some patients were delirious. The pains of the breaft and fide were very acute, the latter extending as low as the leg. Some had great oppression about the Bilious vomitings and purgings, and præcordia. idle notions, with fear of falling afleep, were very troublesome; as were hæmorrhage at the nose, and fenfation of chilliness during the whole paroxyfin. Their pulfes were irregular, and their skin impressed a disagreeable sensation on the singers. In a few cases, instead of one, there were two paroxyfms, or a double one, as before. But every patient, in whose case a remission was evident, had two paroxylins within the first period, or fortyeight hours; a few cases exceeding that time by three or four hours only. In two cases only one paroxysm occurred, which continued nearly the whole period. As to the paroxysms, the first was of longest duration in some, and the second in other cases; but neither exceeded twenty-four hours, except the two mentioned.

The preceding paroxyfm left the fick very weak, anxious, and dejected; with burning heat in the 2 A 4 palms

palms of their hands, and foles of their feet; loss of taste, or bitter taste in the mouth, and insatiable thirst. The remission continued longer, and was more distinct in some cases than in others. In one patient it continued nearly the whole period, which proved to be only a very deceitful calm, for he had two violent paroxysms the period following.

In the fecond period, a few patients had one long and two fhort paroxyfms—fome one long and one short—and others had but one paroxysm, which was of longer duration in some cases than in others. So much they continued to vary, and even in the fame patient the hour of commencement was altered. In the paroxyfms, which were still preceded by chilliness, besides the former symptoms, there were now troublefome cough, during which the head feemed to open and shut \*; stricture and pain over the eyes and at the bottoms of the orbits: great difficulty of breathing from weight and oppression about the præcordia, together with faintness; frequent and deep fighs; swelling and constipation of the abdomen. Some complained of dyfuria; of the urine being very fmall in quantity and quite turbid, which indeed occurred in the former period in one case; of bilious vomiting and purging in the place of a paroxysm; of profuse hæmorrhage at the nofe; and of dread of falling

<sup>\*</sup> As mentioned before, the patient's own words are frequently inserted.

asleep. Anxiety and despondency were greater; delirium was more general; some of their tongues were brown and rough; and their countenances were fallow and shrunk.

The paroxysms in a few cases ended with bilious stools and moderate perspiration; but generally they ended, as before, in profuse sweat. One or two patients had a very mild period. During the remissions, which again varied in duration, the sick were all much weaker; nothing pleased the taste; none of them would swallow any food; their giddiness and weakness were greater; and some were faintish on the least motion.

In the third, as well as in the former periods, fome patients had only one, fome two, fome had three, and fome four paroxylms, which were preceded by griping. Many new and more alarming fymptoms appeared. Those who apparently had not hitherto been fo bad were much weaker, and their fpirits more depressed than other patients whose paroxysms had been more violent. Coma; an immoderate discharge of urine; acute pains were complained of by fome patients who had none before; straitness about the breast and side; much pain, with oppression about the scrobiculum cordis; great anxiety, depression, and despondency. The pains of such patients as had any before, now extended more and more. Cough with wheezing and great difficulty of breathing were more general. Partial, angry, prickly heat, like eruptions, appeared. The tongue in fome

fome cases was white and dry; in others husky, and the teeth covered with black fordes. Pain about the throat, which rendered deglutition difficult; and flushing of the countenance were greater; the pulses were more irregular, and all the other symptoms were aggravated. An obvious privation of the intellects, and of motion, except convulsion about the mouth, was observed. The extremities were cold. Cold clammy sweats; a tremulous thready pulse; and subsultus tendinum prevailed. The impression on the singers from feeling the pulse was more disagreeable, and continued longer.

The remissions in the third period were very imperfect; and, besides the former complaints, which were all aggravated, the sick were extremely weak and quite faint. But the remission preceding the fourth period was much more distinct, and of longer duration than any preceding one.

In the fourth period, a few had two mild paroxysms; and several patients had none; but they still had a constant febricula, with giddiness; lumbago; prostration of strength, and faintness; with cold sweats in a few cases. The medicines puked some, and purged more of the patients. Eruptions broke out about their mouths.

Even in the fifth period, one or two patients had flight paroxyfms.

The preceding is an accurate relation of the bad Remitting Fevers which occurred during the three

voyages,

voyages, except two cases which I shall describe hereafter in their proper places, under the term of Anomalous; as they not only differed widely from the other cases; but were managed very differently.

#### SECTION JII.

# Observations on the Remitting Fever.

THE odd days 3, 5, 7, and fo on, were remarkable for more paroxysms, for continuing longer, and for their violence.

The remission on the 3d and 4th days was very deceitful; for an exacerbation returned on the 5th. The remission which happened on the 6th day, if followed by an exacerbation on the 7th\*, proved fatal. Imminent danger attended obstinate costiveness throughout the fever. Despondency, or despair; or fear of dying, was exceedingly dangerous. The case proved extremely bad when the patient was seized with sudden giddiness and faintness. The sickness at the stomach which continued

<sup>\*</sup> See the last anomalous case, described in July and August 1772.

until the 11th day was mortal \*. Spitting a little blood, and a few drops falling from the nofe, proved mortal †. Nor was the event more favourable where natural evacuation occurred without being forced by medicines. Urine highly coloured, in fmall quantity, and depositing a lateritious fediment, proved fatal. The case was equally dangerous when the urine was pale, depositing no fediment, and containing filaments or finall clear air bubbles.

Of all the prognostics, which I have formed in remitting fevers, the most fatal is—When the patient thinks himself too well to be in bed, but does not feel himself in a proper state; and when he is very anxious, uneasy, yet scarcely makes any complaint, though it is evident he is not recovering. Roaring out without being able to assign a cause, and convulsive rigors, followed the use of Doctor James's sever powder, on the 11th day of the last anomalous case.

With

<sup>\*</sup> This was a case arising from morbid viscera, as before noticed in the note subjoined to that case; but in the first edition was improperly classed with the two anomalous cases of fever. In the table it is styled cachexia.

<sup>†</sup> Cleghorn has made the same observation.

<sup>‡</sup> I will not, however, take upon me to say that these symptoms were the consequence of that powder; but in justice to the public I must say, on the fairest trial which I have repeatedly made with it, and with tartar emetic given in simple water, that the latter was always the most effectual remedy, though much cheaper than the former.

With respect to the critical days, one died on the 7th, and another on the 14th\*. All the other cases were cured by bark.

\* The patient with cachexia or morbid viscera died the 16th, after he complained: but he had been ailing a month before.

## CHAPTER II.

# Method of Curing the Fever.

Letting more or less blood at the commencement of remitting fevers, is not only a practice followed; but insisted on as absolutely necessary by many eminent physicians; whilst others of equal eminence, by their inculcating the utmost degree of caution, and enjoining the strictest frugality in taking away blood, seem, tacitly, to condemn the practice.

When the first or second paroxsyms are extremely violent, the pulse strong and quick, or strong and much oppressed, or quick and hard; when the eyes are much instanced; the skin extremely hot; when there are fixed acute pains about the thorax; and when the patient is athletic, and lately arrived from a cold climate—especially when most of these circumstances concur in one case—it must certainly be necessary to take away blood, whoever may argue to the contrary. But such a case will hardly ever be met with upon the coast of Africa; because the people are some time in a warm climate before they can reach the coast; consequently the pores of the skin being sufficient-

ly opened, the tenfion or rigidity of the fibres, how great foever it might have been before, is now relaxed or removed, which obviates fuch inflammatory fymptoms, should they be attacked by fever. But, though there may be an apparent urgency for bleeding, it will rarely be found to answer any good purpose. Indeed this will afford little furprife, if it be confidered that the vis vitæ is depressed in a much greater degree than the fibres of fuch patients, as are feized with fever foon after their arrival in hot climates, are relaxed; particularly on the coast of Africa, where the atmofphere, especially in the fickly parts, is always hazy and moift, notwithstanding the fun shines; with heavy dews falling in the night, which amazingly depress the spirits even of those who are well, as I have frequently noticed in the Journal.

Before I went on that coaft, I learned, from obfervation and experience in the West Indies, and at Pensacola, that letting blood in remitting fever was hardly of any service; which, I own, had greater weight with me than any theory whatever. I am so fully convinced of this opinion, that the benefit which practitioners ascribe to opening the vence saphenæ, has been chiefly, if not wholly, owing to the pediluvium made use of upon the occasion, and not to the bleeding.

For those reasons, I was very cautious in using the lancet in treating the fever. I never let blood

blood \* except in the St. Jago fever, when we were just arrived in a hot climate, in two cases of the Sierra Leon fever, and in the last anomalous case †—for which I thought I had sufficient ground, as we were then in latitude 40° 03". But none of the patients were relieved by it. Indeed they became faintish from the loss of a very few ounces, except one of the Sierra Leon fever patients, who was subject to maniacal complaints. I ordered twelve ounces to be taken from that man; and upon weighing it, I found it to be full fixteen ounces. He bore the loss well, however, and with great advantage.

Hence it appears that the greatest diffidence is requisite in regard to the most specious theory in favour of blood letting in the remitting severs of hot climates.

Any precaution that might have appeared neceffary to be taken during the first paroxysim, especially the cold stage, was defeated by the patients seldom complaining until the paroxysim was ended.

The first step therefore generally taken towards the cure, was to give an emetic. But though nature indicates the necessity of this evacuation, either by retching or nausea, some practitioners

wholly

<sup>\*</sup> The case of remitting fever of December 1772, does not come within the exception, because it happened in a cold climate.

<sup>+</sup> See Mr. F.'s case.

wholly condemn it. However, as their objections appear to be only the offspring of a favourite theory, they do not merit ferious attention. The quantity of bile which is brought up; not to mention the advantages of its frequently promoting evacuations by ftool, urine, and perfpiration, will render it necessary, in the opinion of those who are guided by cool reflection, and experience.

If it happened that I did not fee the patient during the first paroxysin, I always gave the vomit before the fecond commenced. Otherwife I ordered it either in the cold, or in the hot stage. But I always delayed giving it until the paroxyfm was ended, if the fweat had commenced before he applied; prescribing, in such cases, only tepid subacid diluting drink to promote the fweat and the urinary difcharge, as well as to allay the patient's thirst, and after it ended the vomit was given. When there were no fuch regular stages during the paroxyfm, as too generally occurred, I gave the vomit when he applied; after the fame manner as in the fever on board the Weafel\*, which was wrought off with warm water, barley water, or very thin gruel. By which means, as already observed, a copious stool or two were obtained, a free perspiration was promoted, and the paroxysm terminated more fpeedily, when it was given in either of the two first stages than ever happened when the fick did

\* See page 76.

VOL. 1. 2 B

not

not complain until the fweat had broken out. In these cases drink only was administered until the remission, when the vomit was given.

If the vomit was given in the evening, I prefcribed a faline draught with more or lefs of effen. antimon. at bed time, according to the age of the patient and other circumftances, with fage tea or barley water, to which acid or fal. nitr. were occafionally added: and a purge the next morning.

But when the vomit was administered in the morning, whether it procured one or two stools, I generally ordered the purge to be given in two hours after its operation. The purge was an ounce of the fal. cathart. amar. dissolved in half a pint of thin gruel or barley water, divided into four parts, and one of them given every half hour. The stomach being apparently loaded with bile, and the intestines with bilious Saburra, I thought they never could be too soon emptied of their noxious contents, which this method always effected in a mild and gentle way; and indeed I found it sometimes necessary to repeat both those evacuations, particularly the purge, in the course of the fever.

Of all the authors who have written on the treatment of remitting fever, which I have met with, though they differ in opinion with respect to bleeding and vomiting, not one condemns purging; the advantages arising therefrom being too obvious to admit of any theoretical dispute, or hesitation, concerning the propriety of this evacuation. Indeed it

is aftonishing to see the prodigious quantity of uncommonly setid, if not putrid, colluvies, which is discharged by the purge, and sometimes without it, to the great relief of the patients. In some cases they never have a stool, unless laxatives are administered; and what would be the consequence, if the putrid Saburra was pent up in the intestines throughout the sever.

Though purging is abfolutely necessary, I apprehend that the most dangerous consequences would ensue from drastic purges; I therefore made use of no other than either the sal. cath. amar. or Glauber, generally alone; to which may be occafionally added any other medicine. Tamarind beverage proved not only an agreeable drink, but likewife a laxative; by which two very material advantages were frequently obtained. It no doubt would be most proper to administer the purge in a remission; but I found this generally so short and imperfect, and often fo uncertain, that I very feldom waited for it, but gave the purge foon after the operation of the emetic was over, as I have already mentioned, or early next morning, and the faline draught \* with effen. antimon. at bed time.

Notwithstanding the indifference with which saline draughts are mentioned by some authors, I

<sup>\*</sup> It was always made with vegetable acid when I could get it; and likewise added to their drink.

found them a most useful vehicle for the antimonial wine or tart. emet. as well as ferviceable in affifting to allay thirst. They were made after the usual manner, and well diluted, and the antimonials added in fuch proportions as I judged proper. But n fome cases I preferred the sp. Mindereri, to which he antimonials were always joined. I gave a large spoonful of one or other of them every hour, or every two hours; and I am certain that this medicine frequently shortened the paroxysm, by promoting freely the urinary as well as cutaneous discharges. During the remission it was given much feldomer. Sometimes I gave camphor, though it fcarcely ever agreed with the patient in any form, and at others, the pulv. contrayerv. com. but I found them of little fervice. When the head-ach was violent, the tinct. theb. given after Dr. Lind's method, was ferviceable for a time, especially if the pediluvium was joined to its affiftance; though blifters were much more effectual in relieving it.

However, without bark there was no cure; for the only two who died took none, for the reasons I before stated. I always administered the bark in substance, to the quantity of one drachm, one and an half, or two drachms, which dose I never exceeded; and never ordered it seldomer or oftener than once an hour, until I thought the patient out of danger. Sometimes I gave the tincture along with it; but the dose was not diminished. When

I first

I first began giving it, the stomach was often so weak as not to be able to retain it in water alone. It was for this reason I added either tinct. cort. Peruv. Huxham, 3ij.; or a spoonful or two of wine; or tinct. theb. gut. x. to every one, or every two doses, until the stomach acquired sufficient strength to retain it in water only, which, commonly, was after six or seven doses.

Though this manner of giving the bark was far from being elegant, I have the fatisfaction to fay, that it never failed me once, in all the cases of remitting fever which occurred on board the Rainbow. I mixed an ounce of the powder in twelve ounces or three gills of fimple water, and ordered that quantity to be given in eight hours. When I wanted to give a drachm and a half every hour, an ounce and a half was mixed in a pint of water, which was ordered to be taken in eight hours; and when I ordered two drachms of it every hour, two ounces were mixed up in five gills of water, and given in eight doses; to each of which sometimes were added a few drops of elixir of vitriol; and the patient washed his mouth with a little of his drink, and fwallowed it after every dose. Whatever be the vehicle in which it is to be given on board ships, it is absolutely necessary to mix it up before it be delivered into the charge of the attendants on the fick; for to give it out in papers, in fingle doses, would not only employ one person constantly 2 B 3

conflantly to dispense them, if there were many patients; but the attendants, supposing they were very careful, would be liable, in consequence of the motion of the ship, to lose some of the papers wholly, and a part of every one in mixing it up; but these inconveniences are obviated, by mixing a quantity, and putting it into a bottle, which can be safely disposed of several ways. This precaution, simple as it is, will be found worth attending to, for obvious reasons.

As to the time of beginning to administer it; I thought proper to vary it in different patients; but I never began before the end of the first period, or third day. After I did begin, I continued to give it regularly every hour, night and day—unless the violence of the paroxysms obliged me to omit a few hours—until I was sure there was no danger of the fever returning. For I judged it more expedient to employ the time in administering the sure means of soon procuring them quiet and refreshing sleep, than to allow them to waste it in restless slumbers. On board the Weasel, a remission was introduced by sound sleep, in two cases of the sever, which never occurred on board the Rainbow.

The number of doses was then gradually lessened to once every two, three, four, or fix hours. After they arrived at a convalescent state, I gave them either the decoction of the bark, with elix. vitr.; or the wine infusion before mentioned, twice

or thrice a day, until they were perfectly recovered; which was in an aftonishing short time, considering how very ill many of them had been.

During the cure, I fometimes added the fal. cath. amar. with the bark, when the patient was costive, though it very seldom failed to procure one or more copious stools at first. When the bark brought on diarrhæa or vomiting, which seldom happened, I added the tinct. theb. to it.

Diet had no share in the cure; for except in some very mild cases, I never could get the sick to take any kind of food, unless their drink and medicine be reckoned such, until the sever was subdued. I am therefore surprised at some practitioners of eminence, who prescribe breakfast, dinner, and supper, for their patients during sever, with as much considence as they do medicine; and as if the sick could really be persuaded or prevailed upon to take regular meals. When my patients began to take food, I was contented to indulge them every now and then with a small quantity, as I found them inclined, until they were tolerably well recovered, instead of expecting them, or patients in any acute disease, to eat regular meals.

The diet for the fick on board his Majesty's ships, as well as for the well people, is far superior to what is allowed in any other service. The former is entirely under the direction of the surgeon, and consists chiefly of sago, rice gruel, water gruel,

2 B 4 and

and panada, to which wine and fpices are occafionally added\*; and of portable broth with barley, befides what the captain and officers in most ships fend them from their tables; fish, when they can be caught with seines, or hooks and lines—every ship being supplied with one or two seines, and a proportion of hooks and lines, according to the number of the men, and the service the ship is employed on. Of whatever is caught, the sick always get the first share. After the captain and officers are served, the remainder is equally divided among the ship's company.

Before I finish this head, I cannot help making mention of a circumstance which I observed with much pleasure amongst the fick, when the fever prevailed on board; and though it may feem trivial, it feldom happens in a ship, or perhaps among shore patients. A visible satisfaction appeared in their countenances, when I began to give them the bark; and even they, with whom it disagreed, took it with cheerfulness—which was certainly owing to their own observation of its salutary effects, in the cases in which they had seen it administered.

<sup>\*</sup> Flour and water well boiled, thin, with a little wine, sugar, and cinnamon, added to it, makes a good mess. But the provision for the sick, in 1796, was liberally increased.

### CHAPTER III.

Cases of the Fever.

### SECTION I.

Cases of the Fever at St. Jago.

### CASE I.

JOHN EVERET, marine, aged about thirty, on February the 3d, 1772, when fentinel over the water on the booms, the night after anchoring in Praya Bay, at the island of St. Jago, was affected with chilliness, succeeded by heat and rigors alternately, which continued eight hours. He then became very hot and thirsty, with vehement headach, and fevere pains in his bones, particularly his loins, which continued three hours. A profuse fweat then broke out on him, by which he was relieved.

About noon of the 4th, but still the first day of his illness, a paroxysm returned without any chilliness. P. m. in this exacerbation all the symptoms were more violent, and the pulse was full and quick. Near ten ounces of blood were let which occasioned faintness, and an emetic being administered in four hours after, it brought up

much

much bile, gave him feveral copious stools, and promoted a free perspiration. But the paroxysm was not ended before midnight.

2d, He was tolerably cool in the remiffion, but complained of great proftration of ftrength; univerfal pain; and loss of appetite. I prescribed elix. vitr. twice in the day, and a faline draught with effen. antimon. and subacid drink at bed time.

3d, At midnight a paroxysm returned, which remitted at 6 a.m. Another paroxysm returned at noon, which continued about four hours; and though neither of them were so violent as the preceding, he complained during the remission of much greater weakness and giddiness; and the pulse was small and quick. I repeated his antimonial draught every four hours.

4th, A. m. he had a fhort paroxysm preceded by rigors; he was very feverish, thirsty, and, with his former complaints, had a pain in his right side all day. He continued his saline antimonial medicine as before.

5th, He awoke at four a.m. in a profuse sweat, quite languid, and dejected. I ordered him a drachm of bark every hour. At ten a.m. a paroxysm returned with more violence than ever; and the pain of his side extended down to his knee. During the paroxysm he took his antimonial medicine as before.

6th, The fever continued all day with burning heat in the palms of the hands and foles of the feet.

feet. I ordered him tart. emet. gr. ¼, every two hours, which purged him feveral times.

7th, At midnight a fhort exacerbation came on, which continued all this day. But I prescribed the bark again, with a little elix. vitr. and he took an ounce and a half, which sat easy on his stomach.

8th, He complained of weakness only; and took the same quantity of bark as he did yester-day.

9th, 10th, 11th, 12th, 13th, 14th, and 15th, He continued recovering, and took half an ounce of bark daily.

On the 16th day he returned to duty; and took the decoction of bark twice a day for some time after.

### CASE 2.

ANDREW THOMPSON, a strong healthy seaman, aged about 36 years, was taken ill the 3d of February, p. m. while at work on the shrouds, but complained only on the 5th, when the head-ach, and pain in the loins were violent; he was very giddy at times, and his pulse was quick and full. He had been very hot, and sweated profusely ever since he was affected in Praya Bay, St. Jago. I ordered ten ounces of blood to be taken from him, by which the pulse was much lowered, and he became faintish. In three hours after he took an emetic;

and

and the faline draught with the antimonial at bed time, after the pediluvium.

2d Day of his complaining, he faid he had refted very indifferently, and that the head-ach and thirst still continued; though his loins were easier. I prescribed a dose of falts for him, which operated well. At 4 p. m. an exacerbation came on, and at bed time he took his antimonial draught with refrigerating drink.

3d, The paroxysm remitted at midnight. His skin was pretty cool, but the head-ach continued without any inclination for food; and he was very weak and thirsty. The antimonial mixture was ordered every four hours.

4th, He rested better, and was casy in the morning. At 6 p. m. his sever and complaints returned. I repeated his medicine and drink.

5th, He complained lefs, but the fever and thirst continued. I ordered him a drachm of the bark every hour, which agreed very well with him.

6th, Weakness was his only complaint; and he continued his bark.

7th and 8th, He took only half an ounce of bark each day, and would return to his duty the 9th. I ordered him the decoction with elixir of vitriol twice a day, for fome time after.

#### SECTION II.

# Cases of the Sierra Leon Fever.

#### CASE I.

John Stringer, marine, aged about 32, a very lifeless creature, who never before was in a hot climate, had been drooping some days, and complained on the 27th of February—lat. at noon, 08° 13″—of head-ach; sickness at stomach; and universal pains. I ordered him an emetic which operated well, and an antimonial draught with acidulated drink, at night.

2d, He rested indifferently, owing to weakness and severe pain in his knees; his thirst was urgent; the tongue white; and the pulse fuller and quicker than natural. A. m. a dose of falts; and at bed time the antimonial medicine with drink were prescribed.

3d, He was much better, but could not tell me when, or in what manner the fever remitted. But he complained of weakness; of heat in the palms of his hands, and soles of his feet; and of bad taste in his mouth. I ordered the antimonial medicine three times.

4th, He continued better, though he was both feverish

feverish and costive. I gave him six drachms of the sal. cath. amar. which purged him; and the antimonial draught at bed time.

5th, A. m. a fevere paroxyfm returned, he knew not when; the head-ach was fo violent that his head feemed to open and flut; the pain of the loins was very acute, with great proftration of strength and spirits; the tongue was white and foul; and thirst insatiable. P. m. the fever remitted by profuse perspiration, and left him quite languid and giddy, with his other complaints severer. I ordered him a saline draught with tart. emet. gr. ss. every three hours in the paroxysm; and afterwards the medicine and drink as on the 3d.

6th, He had a very reftlefs night; he generally lay on his back, with his hands folded over the fcrobiculus cordis; where he complained of great oppression, and extreme weakness. He could not tell me when he became worse. At 6 a. m. there was a small remission; his tongue was brown and rough, and his countenance fallow and much fallen. P. m. he was rather better, and his tongue cleaner. I ordered him the antimonial mixture every four hours, and drink as usual.

7th, At 4 a. m. a paroxysm returned with increased violence, and continued all day; p. m. he raved at times, and had stupor. A large blister was applied between the shoulders, and the medicine continued.

8th, The fever remitted a little in the night, and left him quite languid. I ordered a drachm of the bark every hour, which was not regularly administered. 9th, He had a short paroxysm in the night; and continued taking his bark, with elix. vitr. every two hours, which agreed very well with him, 3is. cort. for a dose. He never had another paroxysm, though he continued weak until the 20th of April, during which time he took a great deal of bark.

### CASE 2.

John Wakefield, marine, aged about 40, was feized the fame day as the preceding patient, at 4 a. m. with head-ach; fickness at stomach; and universal pains and soreness. When he first complained, the 29th of February p. m. he found himself worse; his spirits and strength were much depressed; his countenance dejected; and his pulse quick and small. I prescribed an emetic, and an antimonial draught with subacid drink at bed time.

2d Day of complaining, he passed a very indifferent night, all his complaints continuing; and he now complained of bitter taste in his mouth, with urgent thirst. I gave him a dose of falts, which purged him, and repeated his night draught.

3d, At 2 a.m. a violent exacerbation came on; fear and wild notions prevented him from fleep; he had

had stricture and pain over his eyes, across the forehead, and at the bottoms of the orbits; his thirst was insatiable, and he raved much. I applied a large blister between his shoulders, put his feet and legs in warm water, and gave him tart. emet. gr. ss. in a saline draught, with tinct. theb. gut. xv. every four hours, and acidulated his drink with lime juice.

4th, About 2 a. m. there was a flight remission, but his thirst continued; the tongue was white and rough; the palms of the hands, and soles of the feet, were disagreeably hot; he was very giddy; quite languid; and had no appetite. P. m. he was vomited and purged by the faline mixture and essentiation.

5th, A fevere paroxyfm, with bilious vomiting and purging, came on at midnight, and the vomiting continued all night. I ordered him three drachms of Huxham's tincture of bark, with twelve drops of thebaic tincture in three spoonfuls of water with a little sugar every two hours.

6th, A. m. he had a tolerable night, and was much easier, though quite feeble and dejected. I ordered him a drachm of the cortex every hour, to which ten drops of thebaic tincture were added occasionally; but as his stomach would not retain it, it agreed very indifferently with him.

7th, He was pretty eafy all night; but had cold fweats over him, and the pulse was small and very irregular

every hour, in the form of an electuary, to be washed down with two drachms of Huxham's tincture of bark, in two spoonfuls of water, and a little syrup; which agreed with him tolerably well, as he feldom puked it.

8th, He had an indifferent night, and was no better a. m. I gave him every two hours the draught prescribed on the 5th. His medicine run off by stool, and he complained of nothing, although evidently worse.

9th, He rested better than usual, his medicine having been continued all night, and a. m. he was hungry and now and then eat a little thin sago with wine. I ordered him a drachm and a half of the bark every hour, with red port and water, which agreed very well with him, and stopped the purging. P. m. his pulse was much firmer.

10th, He refted well, and a. m. complained only of weakness. P. m. the bark, as prescribed yesterday, was continued, and he had no relapse. He continued taking the bark, until the 29th of March, when he returned to his duty quite well; the number of doses, ana 3i. was gradually diminished in the day, as he acquired strength\*.

# 'In the preceding case I was obliged to deviate from mygeneral method of treatment,

### CASE 3.

WILLIAM TURNER, feaman, aged about 34, came from a merchant ship at Sierra Leon, and on the 29th February, latitude at noon 6° 40″ N. was seized at 2 p. m. with chilliness and head-ach. At 6 p. m. when he complained, the head-ach was violent; his eyes watered much; and he had severe pain in his right side. As he was a strong man and his pulse full, I ordered six ounces of blood to be taken from his arm, which he bore ill; and an antimonial draught to be repeated every three hours during the paroxysm.

2d, At 5 a.m. the paroxysin abated; but the head-ach and pain of his side continued, with thirst and sickness at stomach. I prescribed an emetic for him, which operated well, and procured him two copious stools; and gave him the draught at night.

3d, At 2 a. m. a paroxysm returned with increased violence; the pain of his side extending down to his leg; the pulse quick and sull; the tongue white; insatiable thirst, and he raved much. About 5 p. m. there was a slight remission; but his complaints being very little alleviated, I ordered the pediluvium during the paroxysm; and a saline draught with sisteen drops of thebaic tincture and half a grain of tartar emetic every three hours.

4th, He rested very ill from the pain of his side; difficulty

difficulty of breathing; universal uneasiness; constipation of the bowels; and the abdomen tumid. I ordered him sal. cath. amar. 3 i. dissolved in a little thin gruel, and to be repeated every hour, until he had several copious stools, which relieved him much; and at bed time the antimonial draught.

5th, He had a very restless night, from bilious vomiting and purging. I prescribed the tinct. cort. Peruv. and tinct. theb. as in the preceding case, with water and toast for his drink.

6th, About eleven p. m. a violent exacerbation came on with great inquietude; much pain and oppression about the præcordia; short frequent cough; wheezing and laborious breathing; wild notions and dreams; and all his former complaints, except the vomiting and purging, were greatly increased. The pediluvium was repeated, a blister applied between his shoulders, and camphor. gr. v. with his antimonial medicine and drink, was administered every three hours.

7th, He was much easier, though his spirits and strength were much exhausted; he was very thirsty, and complained of burning heat in the palms of his hands, and soles of his feet. I ordered him a drachm of the cortex every hour, which sat easy on his stomach, until a paroxysm returned p. m.; the bark however was continued.

8th, He retched with his bark feveral times in the night. I ordered tinct. theb. gut. x. to be added to every dofe, which kept it on his stomach. From 4 to 10 p. m. he had a paroxysin, during which the bark was continued.

9th, The prickly heat broke out on him, and he found himself hungry. I ordered him the bark alone, which agreed very well with him; and he eat now and then at his pleasure a little sago with wine. He had no return of his sever again; but continued taking bark, until he returned to duty on the 29th of March.

## CASE 4.

M. S., aged about 30, who had never been in a hot climate before, after drooping fome days, and having been much afraid of fickness from lying ashore at Sierra Leon, was seized, on the 2d of March, at noon, latitude observed 5° 40″, with chilliness and retching that continued some hours, and was succeeded by great heat, severe head-ach, pain in the loins, lassitude, despondency, a slushing of the countenance, and thirst. His pulse was very quick, though rather softer than natural. It being late when he complained, I ordered the antimonial draught every two hours, and acidulated drink.

1st Day, the fever remitted a little in the night; yet he complained of great prostration of strength, giddiness, and dejection. I ordered him an emetic, which operated very well both by vomit and stool.

At 10 p. m. a paroxysm came on with increased violence; the head-ach with pain over the eyes, which were much inflamed; and pain at the bottoms of the orbits were very severe; and the lumbago reached quite round the abdomen. I repeated the antimonial medicine, as before, and also his drink.

2d, He had a very reftless night from purging; universal uneasiness and pains, especially in the head and loins; insatiable thirst, and a dry hot skin, besides his other complaints. At 6 p. m. he fell assep, which did not at all relieve him, being much disturbed with frightful dreams. I repeated his medicine, and the pediluvium.

3d, He had an exceeding bad night, from great defpondency, wild notions, and delirium. I ordered him a drachm of the bark every hour, which he puked frequently; and therefore I ordered the bark with the faline mixture, in a flate of effervescence. At 10 p.m. he complained of no pain, though the fever continued; his body was open.

4th, The skin was hot and dry, and he was much troubled all night with inquietude and thirst. A. m. he complained of no pain; sighed heavily from great oppression about the scrobiculus cordis, and the pulse was very irregular. At 8 a. m. an exacerbation returned with less violence, which continued until 10 p. m. In its height, I ordered the antimonial medicine every two hours, and the

2 c 3 pediluvium;

pediluvium; and at other times the bark, and a fmall glass of wine after every dose, which kept it on his stomach very well. The urine he made during the paroxysm contained neither cloud nor sediment.

5th, He had an uneafy night. A prickly heat like eruption appeared on his face, breaft, and shoulders. A. m. he was much better. I ordered the bark and wine as before, which he puked only twice. At 8 p. m. a slight paroxysin came on; and an angry eruption broke out about his mouth. He still continued the bark and wine.

6th, He rested well in the night, and complained only of great weakness and depression of spirits. I prescribed the bark with wine every hour, as before. He had no return of his sever, and continued to take the bark until the 27th of the month, when he returned to his duty.

## CASE 5.

JOHN WILLIS, marine, aged about 28, a strong man, subject to maniacal complaints, who never had been in a hot climate before, on the evening of the 6th of March, latitude at m. 4° 16" N. was seized with rigors, and universal pains; but did not complain until next morning, when his head ached violently; his eyes were greatly inflamed; and his pulse was much oppressed. I ordered twelve

twelve ounces of blood to be taken from the arm; but on weighing it I found it i had been taken away. An emetic, in four hours after, was administered; and after the pediluvium, which puked him well, the antimonial draught, with plenty of acidulated drink at bed time. The blood was fizy, the ferum red and little in quantity, and the crassamentum rather loofe.

2d Day, the head-ach and pains still continued. I prescribed a dose of salts; and after the operation, the antimonial medicine, with the pediluvium and drink. P. m. the head-ach remitted; but he complained of pain in his breast, and thirst; and the pulse was rather quick and softer than natural.

3d, He had a reftless night from an exacerbation of fever. A. m. the head-ach was very troublesome, with cough; foreness of the throat; and pain of the breast. I applied a large blister between the shoulders, and continued his medicines as before.

4th, Though the fever was moderate he rested indifferently in the night; complained still of head-ach; of universal pains, and of thirst. The antimonial medicine was repeated every four hours.

5th, There was no alteration for the better, and he was very costive. Of a mixture of Peruvian bark, and bitter purging falts, each six drachms; lime juice two drachms; gruel half a pint, he took one fourth part every hour. His medicine purged him only once; he was very cool at night.

2 c 4

6th,

6th, He was much better, and took his bark as before.

7th, The bark was prescribed with elix. vitr.; and he continued taking it, only diminishing the number of doses, daily, until the 17th of the month, when he returned to duty.

Three other marines, of the watering party at Sierra Leon, were feized in the fame manner with fever, and recovered by the fame means, the worst of them, in twenty-five days.

### SECTION III.

Cases of the Fever at St. Thomas.]

### CASE I.

WILLIAM LAUCHLAN, feaman, aged about 50, on the 24th of April 1772\*, p. m. was feized with chilliness, head-ach, and severe universal pains. Next morning when he complained, after having been very hot, thirsty, and restless through the night, the skin was dry and hot, the pulse quick, the tongue whitish, and thirst insatiable, with great prostration of strength and spirits. I ordered him

<sup>\*</sup> Latitude at noon 0° 9" South.

an emetic, which operated well; and the antimonial mixture every four hours, with nitre in his drink. At 9 p. m. there was a finall remiffion.

2d, He refted very ill in the night. He was very weak, giddy; his thirst was insatiable; and his pulse quick and small. I prescribed a dose of salts, and his antimonial draught at bed time, with his drink. At 6 p. m. an exacerbation came on, which remitted at 10 p. m.

3d, He had no rest in the night, a violent paroxysm having come on at 1 a.m. with frequent cough; and great despondency; besides the former complaints; the tongue being foul, and costiveness. At 3 p.m. a slight remission came on, during which the symptoms and thirst were not perceptibly alleviated. I continued his medicine every two hours in the paroxysm, and every four in the remission. Another exacerbation with dysuria began at 9 p.m.

4th, He was quite languid from great inquietude in the night. There was a flight remission at 6 a.m. though his head was like to split; the universal pains were severe, particularly in the loins; the palms of his hands and soles of his feet were very hot, and his thirst continued. I prescribed sal. cath. amar. 3s. which gave him several stools; I afterwards repeated the antimonial medicine, and made him use the pediluvium.

5th, His cough was very troublefome; and increased

creased the head-ach. The pulse was very irregular. At 4 p. m. an exacerbation of the fever and symptoms returned with great pain about the scrobiculus cordis, and remitted imperfectly at 6. At 8 p. m. it returned with greater violence; and the tongue was brown and rough.

6th, A flight remission commenced at 11 p. m.; and at midnight a violent paroxysm returned. Besides the former symptoms, which were more increased, he had great pain about the throat; over the eyes, and at the bottoms of the orbits; when he coughed, his eyes were like to start from his head\*, and he raved much. At 4 a. m. a slight remission; at 6 the paroxysm returned, and remitted again impersectly at 4 p. m. His pulse was very irregular, and a disagreeable sensation remained on the singers for some time after seeling it †. I applied a large blister between his shoulders; repeated his medicine with pulv. contrayerv. c. camphor. ana gr. vi. in a bolus, every three hours.

7th, He was in less pain in the night, though the cough continued incessant; and he was quite languid. I ordered him a drachm of the bark, with a little wine every hour; and though he puked it several times, he was rather easier at night.

<sup>\*</sup> The reader is to remember that the patient's own words are inserted.

<sup>†</sup> This was observed in every case.

1772.]

8th, He complained chiefly of the cough. He continued the bark and wine, which agreed very well with him. At night he was cool, and the cough lefs. Last twenty-four hours he took two ounces and a half of bark.

9th, He continued taking the medicine in the night; and had no complaint but weakness. He took the bark every two hours, with wine only; of which he had his allowance. He afterwards took the bark with elix. vitr. until the 8th of May, when he returned to duty; but I gave him the decoction with elix. vitr. for some time after. This is one of the cases which relapsed with change of weather.

### CASE 2.

PETER WILLIAMS, feaman, a very strong mulatto creole, aged about 34, on the 27th of April, latitude at m. 0° 41" S. at 10 a. m. was affected with fevere rigors which continued two hours; violent head-ach; sickness at stomach; universal pains, especially in his loins; ardent fever, with vehement thirst. Great anxiety succeeded the cold stage, which terminated in profuse sweat. It being late in the evening before he complained, I ordered him the antimonial mixture, and subacid drink.

1st, About twelve last night there was a slight remission. A. m. I ordered an emetic: in two hours after its operation, sal. cath. amar. Zi; and at night

the antimonial medicine, to be repeated every four hours, with fubacid drink.

2d, At 11 p. m. an exacerbation came on with greater violence; and delirium. It remitted a little at 4 a. m.; and returned again at 10 a. m. with chilliness. The paroxysm continued severe until 8 p. m.; during which, besides his former complaints, he had great pain and stricture about his eyes, which were much inflamed; with costiveness. During the imperfect remissions there was great prostration of strength and spirits, with giddiness. He complained also of universal pains; uneafiness; and infatiable thirst. I repeated the antimonial medicine every two hours in the paroxysms; with the drink and pediluvium occasionally.

3d, He passed last night better. I ordered six drachms of fal. cath. amar. with thin gruel, which procured feveral copious stools; and the antimonial medicine at bed time. At 6 p. m. a violent exacerbation commenced, with bilious vomiting and purging; dyfuria; and great inquietude.

4th, He was very much disturbed with delirium; inquietude; vomiting and purging all night. At 7 a. m. I observed a slight remission, during which his pulse was full and very foft; the tongue was remarkably fmooth; he was greatly dejected; quite languid; complained of a bitter taste in the mouth; and of burning heat in the palms of his hands and foles of the feet. I prescribed the antimonial medicine in an

effervescent

effervescent state with tinct. thebaic.; applied a large blister between his shoulders; and repeated the pediluvium. At 6 p. m. a paroxysin returned; during which he raved greatly; and was comatose. I ordered pulv. contrayerv. c. camphor. ana gr. vi. every four hours; with other medicines.

5th, At 10 p. m. a flight remission appeared, which continued two hours. Then a violent paroxysim commenced with great oppression about the scrobiculus cordis. He was highly delirious and outrageous with extreme watching. The tongue was black; and other complaints were more severe; the coma excepted. About 7 a. m. a very impersect remission. I continued the medicines prescribed yesterday during the paroxysim; and applied blisters to the ankles. At 7 a. m. I ordered a drachm and a half of cort. Peruv. pulv. every hour, with a little wine. At 10 p. m. he found himself easy and cool, having taken twenty-two drachms of the bark, which agreed with him.

6th, Between midnight and 2 a. m. a very flight paroxysm was observed; at other times he was quiet; easy; and took the bark. P. m. he was very easy all day. He took a drachm of the bark every hour, with elix. vitr.; and I allowed him his. wine.

7th, He had a good night's rest, and was recovering. I prescribed the bark with elix. vitr. every two hours; and his wine.

8th, He continued to recover; and took half an ounce of bark. Afterwards he took the decoction of bark with elix. vitr. and returned to his duty the 7th of May. The change of the weather affected him frequently afterwards.

## CASE 3.

James Ayslop, aged about 15, of a very thin and paralytic habit; had never been in a hot climate before; was taken ill, at the fame time as the preceding patient, with the general fymptoms of the fever. When he complained next morning, he found himfelf worse in every respect, after a restless night. I ordered the emetic; and two hours after its operation, a dose of sal. cath. amar. with gruel. At noon a remission appeared. At night, I gave him the antimonial medicine, with subacid drink.

2d Day, he had a tolerable night; but complained of great weakness; giddiness; and that his medicine griped him. I therefore added to every dose a few drops of tinct. thebaic. every four hours. At 4 p. m. a severe exacerbation came on, which remitted impersectly at 10; in the course of it he had several bilious stools.

3d, At midnight a paroxyfm returned; which remitted at 6 a. m. leaving him quite languid and dejected; with the usual complaints. At 4 p. m. another exacerbation began and remitted a little at 8.

As he was costive, the antimonial medicine was given in fmall quantities every two hours, without the tinct. theb.

4th, A fevere paroxysm, preceded by griping, had commenced at midnight; and remitted at 7 a. m. All the symptoms were more troublesome; and he continued to take his medicine.

5th, He was tolerably eafy in the night, but had no fleep. At 6 p. m. an exacerbation came on, which continued only a few hours; but the remission was very imperfect. His medicine was continued.

6th, His complaints were in no respect better. I ordered him a drachm of the bark every hour; through negligence, he only had been given one or two doses. P. m. he was rather weaker.

7th, His tongue was very foul, and the other fymptoms were very troublesome in the night; but he took his bark every hour, and continued to take it all day, with a little wine after every dose, which agreed very well with him.

8th, He was much better; and complained of weakness only. I repeated the bark as before. He continued to take it; only diminishing the number of doses gradually; until the 10th of May, when he returned to his duty. He took the decoction of the bark with elix. vitr. twice a day, for some time after.

#### CASE 4.

M. R., aged about forty years, a strong man, of middle size; of a florid complexion, and of an healthy constitution, after drooping a few days, on the evening of the 28th of April 1772, lat. at noon 1° 12" S. was affected with head-ach; pains in all his limbs and bones \*, and thirst. 29th a. m. the 1st of his complaining, he was sick at stomach; with an exacerbation of his former complaints. His skin was disagreeable to the touch, though not remarkably hot; his pulse was quicker than natural; his tongue was white; with prostration of strength and spirits. P. m. a vomit operated well. He was very anxious and much afraid.

2d, He had a bad night; was costive; his head light, and rather giddy; he wandered a little; was nice about trifles; his urine was high coloured with whitish fibres in it; the pulse was irregular; and though he had no severe complaint, he was greatly asraid of dying.

3d, His countenance was flushed and rather wild after having been much haraffed with inquietude in the night, with fear of falling asleep from idle notions tormenting him. His head was more light and giddy, notwithstanding he had a

number

<sup>\*</sup> This was his own phrase.

number of copious fetid stools, and complained little. The pulse and skin continued much the same; and his urine was paler without cloud or sediment.

4th, He passed a very restless night; and the skin was quite dry. Sometimes he had a pain for a short time in his right leg; but he complained very little, only by expressing despondency. His urine continued pale. P. m. a small cloud appeared at the top of the glass, but in the night there was no sign of it; and the urine was very pale. He had two copious stools; and from his looks, spectators imagined there was very little the matter with him.

5th, He had an exceeding uneafy night; he fighed frequently; his pulse was softer and flower, his skin drier and hotter than natural; the tongue was white and scabrous; and the urine pale with filaments in it. When quiet, he lay with his hands folded over the thorax, and frequently clapped the scrobiculus cordis with his right hand; and when spoke to he raised himself suddenly upon one of his elbows. P. m. he complained very little; slept for a short time, and awoke frightened. He had a copious stool, and his urine was full of clear small air bubbles.

6th. He was more restless than usual. He wandered much, talked constantly of dying; his skin was dry, hot, and disagreeable to the touch; a prickly heat like eruption broke out on his breast and vol. 1. 2 D neck,

neck, and his urine was of a bright amber colour without cloud or fediment. P. m. he wandered more, and was extremely reftlefs. At midnight he was quiet, without any complaint; fwallowed his medicine in an unufual manner, and refused to take the whole of it. His spirits, apparently, were very much agitated: after which he lay down as to sleep, and died at 5 a. m. on the 7th day of his illness.—He had a copious stool the 6th day.—From first to last there was no remission. For the manner in which he was treated, see the Review of the Sick List, May 1772.

## CASE 5.

THOMAS DALE, marine, aged about 38, had never been before in a hot climate; on the 30th of April, at 8 p. m. latitude observed 2° 10" S. was feized with all the general fymptoms of fever, which remitted at midnight for a short time. When I saw him at noon all the symptoms were more severe; and accompanied with deafness. I ordered an emetic, which operated well; and the antimonial draught at bed time, with nitre in his drink. P. m. a slight remission appeared.

2d, He rested very ill, being troubled with much inquietude, and lumbago. I prescribed an ounce of sal. cath. amar. with gruel, and the antimonial medicine

medicine at bed time. Three p. m. he complained of chilliness, though his skin seemed hot and dry; and the pulse quick.

3d, He paffed a restless night; and all the symptoms increased with violence, during the paroxysm, which left him quite languid and desponding about 8 p.m. With the saline mixture, I ordered tart. emet. gr. ss. every sour hours, and suitable drink.

4th, He had an indifferent night. A. m. I found him very giddy; languid, and thirsty, with the other usual symptoms; and nothing pleased his palate. I ordered the antimonial mixture as before.

5th, An exacerbation returned at 10 p.m. and continued until 7 p.m. 21 hours, with urgent cough and pain about the fcrobiculus cordis. I prescribed for him as I did on the third.

6th, He rested ill, an was greatly dejected. I ordered him a drachm of the cortex, with a littlewine every hour. At 6 p. m. a paroxysm began; and during its height he took the antimonial mixture.

7th, Early a. m. a remission appeared; and he took his bark and wine every hour; which agreed very well with him. Though his paroxysms were never violent, he appeared much weaker than others who had more severe ones.

8th, He was recovering, and continued to take the bark as before.

2 D 2

9th,

9th, He had a flight paroxyfm in the night. I ordered the elix. vitr. with the bark every hour, and allowed him his wine.

10th, 11th, and 12th, I gave him half an ounce of bark daily; and afterwards the decoction of bark with elix. vitr. twice a day, which he continued to take fome time after he returned to duty, which was on the 15th of May.

## CASE 6.

Henry Annas, seaman, a strong man, aged about 37, on the evening of the 29th of April, lat. observed 1° 45" S. was suddenly affected with giddiness and faintness, followed by violent head-ach; acute universal pains, especially of the loins; heat, and great thirst. When he complained on the first of May, these symptoms were more severe; he was sick at the stomach; and his pulse was strong and quick. I ordered an emetic; the antimonial draught every sour hours after; subacid drink and the pediluvium occasionally. P. m. there was an imperfect remission.

2d Day, at 1 a. m. a paroxyfin commenced with rigors, which continued until 6. p. m. He complained then of great proftration of strength and universal foreness; his thirst was insatiable; and his pulse soft, besides the general symptoms which have already been described in the remission.

I ordered the dose of fal. cath. amar. and after its operation, the medicines to be repeated as last night, with diluting drink. At 9 p. m. an exacerbation again commenced.

3d, The paroxyfm, accompanied with great inquietude, continued until 1 a. m.; when rigors which lasted three hours ensued; and were succeeded by a most violent paroxysin, which continued until The former fymptoms were greatly increafed. Besides, he complained of dysuria; great pain and stricture over the eyes; and of oppression about the fcrobiculus cordis. The tongue was brown and dry; the mouth parched; and he wandered with flight delirium. The remission was attended with great proftration of spirits and strength, and he was very giddy. I continued the antimonial medicine, in fp. Minder with diluting drink; and repeated the pediluvium every two hours in the paroxysin: his body was open.

4th, He paffed a tolerable night; but early a. m. another paroxyfm began, and continued until 4 p.m. but not fo violent as the preceding one. His medicines were repeated as before.

5th, He was eafy in the night, and a. m. continued fo. At 2 p. m. he was fuddenly taken speechless; and when I was called to see him, I was told he was just dying. I found him lying on his back; his eyes not quite closed; his countenance, very ghaftly, was covered with cold clam-

my fweat, which also covered the breast; the extremities were cold, and his hands folded over the fcrobiculus cordis; the pulse was thready, tremulous, and at times vermicular; the hypochondria were tumid; he was quite fenfeless and motionless; with convulsive twitches about the mouth. He continued in this lifeless state about an hour, notwithstanding he was well rubbed as he lay with flannel clothes sprinkled with volatiles. As foon as he could fwallow, fome volatile drops were administered internally, in a little drink. After the tibiæ internæ were well embrocated with warm vinegar, large blifters were applied to them. Apparent apoplexy\*, fyncope, torpor, or whatever else it may be denominated, were succeeded by mere frenzy: during which his countenance was exceedingly flushed; and his eyes greatly inflamed; the muscles of the neck were quite rigid; the abdomen was tenfe; the skin felt burning hot; the pulse was very irregular, with subfultus tendinum; and the tongue was quite black and dry. I covered his back with a blifter; administered pulv. contrayerv. c. camphor. ana gr. viii. twice; and repeated antimonial medicine every hour, with fubacid drink, before 9 p. m. when perspiration

came

<sup>\*</sup> I do imagine that Dr. Cleghorn gave this appellation to some patient or patients in a similar state. But in this state, there was more of vital expression than there appears in the real apoplectic countenance.

came on. Two drachms of the cortex, with wine and a little tinct. theb. every hour were then administered, which the stomach retained.

6th, The bark was given regularly all night, though there was no remission until midnight; and he continued taking the bark in the same manner until 4. p. m. The remission, though short, was moderate and distinct\*; and was followed by a slight paroxysm which then commenced. He then took a drachm of the bark every hour.

7th, At midnight he became quite cool, and continued the bark and wine.

8th, He was recovering, though very weak, and took his bark regularly every hour.

9th, The bark was still prescribed every hour with a few drops of elixir of vitriol, and his wine allowed him. By the 15th, when he wished to return to his duty, he had taken a pound of the bark in powder; and for some time after, I gave him, twice a day, an infusion of it in wine. He was afterwards very slightly affected with change of weather.

A number more of our men had the fever, from lying on shore at St. Thomas's, and all recovered by the same method of treatment.

\* At 9 p. m. of the 6th, he began and continued, without intermission, until 4 p. m. of the 6th, to take two drachins of bark every hour; during which time he took four ounces and a half, which agreed with him.

## CASE 7.

M. F., aged about fixteen, never had been in a hot climate before, after drooping a confiderable time, on the 31ft July, p. m lat. at noon 34° 58" complained of loss of appetite, head-ach, and sickness at stomach. His pulse was quicker than natural.

2d Day of his illness he complained less, but was ftill feverifh.

3d, He would not take the medicines; but faid he was pretty well, and would go on deck.

4th, He made no complaints, nor would take medicine, though he was entreated.

5th, He complained of being unwell, and very costive. P. m. he was well purged.

6th, He found himfelf better; but he still had a little fever, with thirst, and no moisture on his fkin.

· 7th, He got cold, complained again of headach, and fickness at stomach. His tongue was white, his fkin hot and dry, and the pulse quick and hard. P. m. the pulse was much quicker and harder, nevertheless he became faintish upon lofing about five ounces of blood.

8th, He raved in the night; the pulse was softer and not fo quick; the head-ach, and fickness at stomach continued; the skin was hot and dry, and he was now thirsty.

9th,

1772.

9th, He was very irregular in his living. A. m. he complained of his blifter only, which prevented him from fleeping in the night; he was very giddy when out of bed, p. m.; and began to rave. His medicine procured him a number of copious ftools.

10th, He flept, and perspired a little, but was not refreshed. His skin became hot and dry; he had no complaint, no thirst or appetite; the tongue was white, and a disagreeable sensation remained on the singers for some time after feeling the pulse. P. m. he was very restless, and delirious; he looked frequently at his hands, and bit his nails.

11th, He was quieter, and flept two hours a.m. He vomited what he had eat the preceding day at noon, as entire and indigefted as when he fwallowed it. He flept again, but when he awoke denied that he had flept any. He was more delirious, and reftlefs, particularly with his hands; the lower extremities were cold; ftill he had no complaint. P. m. after taking doctor James's powder, a profuse clammy sweat broke out; be then made some high coloured urine, which deposited a lateritious sediment, followed by several convulsive rigors, which continued some minutes.

12th, He had a very bad night, being troubled with great inquietude. A profuse clammy sweat was again brought on by doctor James's powder; but

no alteration for the better. P. m. he roared out, though he denied that he had any pain, and at times had convulfive twitches. At night the skin was dry and hot; the pulse was foft and irregular; and the tongue was swelled, white, and foul.

13th, He had no rest in the night, though he perfpired. The pulse was very small; he was exceedingly weak, but sensible, and eat a little several times. His tongue was covered with a black crust; he spat a little blood; and had an involuntary discharge of urine, but whether from the blisters is doubtful.

14th, He fpent a very restless night. A. m. he spat a little more blood, and a few drops fell from his nose. The involuntary discharge of urine continued; he had partial sweats; the skin was very disagreeble to the touch, and the pulse very small and irregular. The abdomen, though constipated, was neither swelled, tense, nor painful upon being pressed; yet he seemed to seel great pain upon introducing the pipe of the clyster syringe into the anus with the greatest care; and a very small quantity only of the injection could be thrown up at a time. At 8 p. m. the return of convulsive rigors carried him off.

SECTION

#### SECTION IV.

Cases of the Remitting Fever on the Second Voyage.

#### CASE I.

WILLIAM PEER, marine, aged about 26, who had never been in a hot climate, on the 30th of March 1773, latitude observed 5° 29" N. was seized with pain and oppression about the pit of the stomach; nausea and giddiness. I ordered an emetic; the antimonial draught at bed time; and subacid drink.

2d Day, though he fweated profusely in the night, and his skin was much cooler, a. m. his complaints still continued. I prescribed the purging salts; and the antimonial draught again at bed time.

3d, He had a very bad night, and at 4 a.m. a fevere exacerbation, preceded by rigors, came on, attended with bilious vomiting and griping; with heaviness of the head; great pain in the loins; proftration of strength and spirits; a very quick small pulse; urgent thirst; and increased violence of the former complaints. Towards night a remission appeared, during which he was quite languid and dejected. As the salts did not purge him the preceding day, I gave him two drachms of sal. cath. amar.

every hour, in warm thin gruel, until he had fome flools, and afterwards the antimonial medicine.

4th, He was troubled with much inquietude in the night. At 2 a.m. a paroxysm came on, and remitted at 7, during which he had four copious stools. He took the antimonial medicine every four hours. P. m. he was easier, though very weak. The tongue was foul; and he was harassed with a bad taste in his mouth.

5th, At 2 a. m. a paroxysm with increased violence of former symptoms returned. He vomited feverely, and selt great pain upon pressing the scrobiculus cordis. There was an imperfect remission at 8; and an exacerbation came on again at 11 a. m. which remitted at 6 p. m. He complained of costiveness; giddiness; prostration of strength, and very great despondency. I continued the antimonial medicine, and drink.

6th, He had an easier night. I ordered a drachm and an half of bark, with two drachms of fal. cath. amar. in the first dose; and every hour a little wine, which agreed with him. He had several stools.

7th, He had a good night; was free of fever; complained of weakness only; having taken eighteen drachms of bark, with wine and water. He continued to take bark until the 13th of April, when he returned to his duty, only decreasing the number of doses daily. I gave him twice a day, for some time after, a wine infusion of the bark.

### CASE 2.

FRANCIS EASTMOND, marine, a strong man, on the 9th of April 1773, latitude observed 4° 23" N. a. m. was seized with rigors, which were followed by the general symptoms of sever, and in the evening there was an impersect remission of them. I immediately ordered him an emetic, and at bed time the antimonial medicine; and nitre in his drink.

2d, About 10 an exacerbation came on. He was much troubled with inquietude, and had great pain and stricture over the eyes, and at the bottom of the orbits; besides his former complaints. At 6 p. m. there was a slight remission. I gave him fal. cath. amar. 3j. and at night repeated the antimonial medicine every four hours, with drink.

3d, He passed an indisferent night; and at 6 a.m. a paroxysm commenced with rigors. Besides the former complaints, his pulse was now irregular; and his tongue foul; with watching and delirium. I applied a large blister between his shoulders; ordered camphor. gr. viii. which he nauseated; the sp. Minder. with ess. ant. every four hours, and the pediluvium.

4th, A remission appeared at 7 a.m.; but he was very costive. I repeated the purging salts, which gave him several copious stools; and afterwards the antimonial

antimonial mixture as before. A very angry eruption broke out about his mouth and nofe.

5th, At 4 a. m. an exacerbation returned again with rigors; bilious vomiting; and immoderate difcharge of urine; besides the former symptoms, which remitted at noon. I ordered the antimonial medicine every two hours; and repeated the pediluvium.

6th, He was extremely weak, giddy and dejected. I ordered him a drachm of the bark every hour, and allowed him wine.

7th, He was recovering, and continued the bark until the 18th of the month, when he returned to duty. I then gave him a wine infusion of bark twice a day.

#### SECTION V.

Cases which occurred during the last Voyage.

#### CASE V.

THE following case, properly speaking, is anomalous, because the patient was affected with three distinct and very different diseases, viz. angina parotidæa; hectic, and remittent sever: but as the case

is uncommon, and terminated in a putrid\* remittent, I shall insert it at full length.

RICHARD SPURRET, marine, aged about 36, on the 20th of December 1773, latitude observed, 25° 2", complained of pain and swelling in the left side of his face, which came on in the night; he was thirsty; and the pulse quick and hard. I ordered a few ounces of blood to be let; the part affected to be covered with slannel wet with volatile liniment; the antimonial draught to be given at bed time; and suitable drink.

21st, His face was easier; the epithem was renewed; abstinence from falt provisions enjoined; and the ess. antimon, with sage tea, was repeated at bed time.

22d, The fwelling now extended over the face and down the fide of the throat; he had pain in fwallowing; coughed at times; and the pulse was quick, though not hard. I prescribed the purging falts and a gargarism to be frequently used; a bolus of sperm. cet. and nitre at night, and the epithem to be continued.

23d, The fwelling was more enlarged and harder; the pulse was still quick; and the skin drier and hotter than in health. I ordered a formentation and epithem to be renewed twice a day; I repeated his bolus morning and evening; and at night gave him

<sup>\*</sup> I speak here in the common acceptation of the type.

the eff. antimon. with his drink. He was subject to cough and complaints in the breast.

24th, The parotis was lefs; he had no pain in it; and deglutition was eafy: the tongue was foul; the cough without expectoration was more urgent, which occasioned a head-ach; and he complained of pain in his back. His body was open. I gave him a linctus of sperm.cet.mel.Brit. and oxymel.scill. and acidulated with sp. of vitr. ten. to take the size of a nutmeg of when the cough was urgent; besides continuing his other medicines, I ordered him an opiate and the pediluvium at bed time.

25th, He found himself much better, and coughed less. I ordered the medicines to be continued.

A metaftafis of the morbid matter began to take place; and the difease assumed the appearance of hectic.

26th, He had got cold yesterday, and coughed all night; which renewed the head-ach, with great pain in the breast, and difficult respiration. The pulse was now quick and fuller than in health. A few ounces of blood were let; and acidulated ptisan for common drink was prescribed with his other medicines.

27th, The fwelling and pain had entirely left his face and throat. But he complained of pain and oppression about the scrobiculus cordis; watching; and colliquative fiveats. P. m. he complained more; raved, and his pulse was small, quick, and hard. I applied a large blister to his back; and instead of the lineaus, I gave him the lac ammoniac. with oxymel. scil. & ess. antimon. and ptisan. P. m. I opened both the venæ saphenæ, after pediluvium; added tineat. theb. gut. v. to every dose of his mixture, and allowed the common emulsion with nitre, and the ptisan for his drink.

28th, He was in great pain about the thorax; breathing difficult; after being extremely restless and delirious the first part of the night. He was relieved towards morning; expectorated a little; had two copious stools; and I continued his medicines.

29th, He rested well; coughed little; expectorated freely; breathed easy; and had no fever. He took his mixture every four hours, continued his drink, and had an opiate at night only.

30th, He was much better, and his medicines were repeated.

31ft, He complained of straitness about the thorax, especially the right side; and coughed frequently. I repeated his medicines and drink, ordered the pediluvium; and applied a large blister to the affected side.

January 1st, 1774. He rested well; expectorated easily; breathless from walking up or down the ladder; and complained much of the blisters paining him. I continued his medicines.

VOL. I. 2 E 2d,

2d, From his opiate having been neglected, he coughed, and was restless the first part of the night until he got it. He was easy in the day; made use of his former linctus, with the ptisan; and took his opiate at night.

3d, He had no cough in the night, and complained of weakness of his loins only. The colliquative sweats were not gone. The medicine was continued, and the bliftered parts kept open.

4th, There was no alteration. Besides continuing his linctus, I ordered him a drachm of the bark, with elix. vitr. four times a day.

5th, The cough was troublesome in the night. I ordered the bark twice a day; and as he was feverish, I gave him camphor, gr. v. four times a day, and continued his linctus, ptisan, and opiate.

6th, He had a quieter night; but the colliquative fweats weakened him exceedingly. P. m. he had chills and heats alternately. I omitted the camphor, and prescribed half an ounce of bark, to be taken with elix. vitr. and continued his other medicines and drink.

7th, He was weakened extremely by the fweats; and had a continual small fever with head-ach, and irritating cough. Instead of the lineaus, I gave him occasionally a little olive oil; the emulsion and ptisan for drink; and his anodyne at night. The bark made-him sick p. m.

Sth, He had a purging in the night, which relieved him.

him. I continued his medicines, and repeated his anodyne twice.

9th, He passed the night tolerably, but the fever continued; and the dyspnæa produced no pain. He was not costive; but p. m. his stomach and abdomen were much distended with flatus, which he was anxious to expel. Towards night he became very restless; and at times faintish. His countenance was wild and he raved. I omitted the bark; administered an emollient injection; renewed the blister on his side; gave him wine and water frequently; and the emulsion with nitre for his drink. The injection procured him several stools and free expulsion of wind, which relieved him.

10th, He fweated profusely at every pore until morning, and was very restless from urgent cough. I continued the wine, with very light diet, and gave him an anodyne at bed time.

11th, He fweated lefs; but was extremely weak; his pulse very small; the tongue rough and white in the middle; a tickling in his throat induced cough; he expectorated a little phlegm; and was costive. I ordered the injection to be repeated, which gave him two copious stools; a fost linctus to lick occasionally; and the medicines and diet, to be continued as yesterday.

12th, He rested well, coughed little, and expectorated easily. The pulse was regular; he was cool;

2 E 2

had little thirst, and no appetite. He was still costive. I continued his medicines.

13th, He had very little cough; and complained only of great weakness, and of costiveness. I ordered him two ounces of a decostion of sena, tamarinds, and cardamom. min. which gave him three copious stools. P. m. he had little cough; and his medicines were repeated.

14th, He complained only of weakness. I prefcribed a drachm of the bark twice a day, with wine and the elix. vitr. which agreed with him.

15th, He continued better; and took his bark as before, with nourifhing diet.

16th, The constipation of his bowels continued. I gave him fal. cath. amar. zij. which occasioned cough and expectoration of phlegm. Afterwards, he took his bark in four doses, instead of two, with his wine as before.

17th, He did not recover firength. I increased the quantity of bark to half an ounce daily, which he took as before.

The fever now assumed the remittent type.

18th, He had no cough, but was very hot the first part of the night, and perspired freely after. I continued his bark, wine, and diet. At 6 p. m. he was seized with chilliness, succeeded by sever, hæmorrhage at the nose, which ended in profuse perspiration.

perspiration. During the paroxysm, I prescribed sp. Minderer. and sage tea.

19th, He was quite weak, especially in his loins; the thirst continuing. I ordered a drachm of the bark with wine every hour. At 3 p. m. a severe exacerbation of sever; of hamorrhage; violent head-ach; great pain in his loins; purging, and urgent thirst came on. The sp. Minderer. and tinct theb. were prescribed, together with his drink.

20th, The paroxyfm continued; the hæmorrhage returned in the night, and he complained of great pain in his knees. At 5 p. m. he was feized with chilliness, and retching, which were followed by fever, hæmorrhage and other usual symptoms. I added tinct theb. gut. x. to the dose of bark, which I gave him every hour, together with his wine.

21st, Without any obvious remission, an exacerbation of fever came on in the night, with very profuse hæmorrhage, at least to the quantity of ib. iv. before it was stopped with dessils immersed in the tinct. stypt. plugged up his nose, and opiates administered internally. His extremities were then cold; his pulse was vermicular; he was covered with a cold sweat; his countenance seemed ghastly, and he was quite faint. At 7 a. m. a paroxysm returned with rigors, and vomiting which continued through the day. His extremities were frequently well rubbed with slannel sprinkled with volatiles, and wrapped up in them; the bark with wine and tinct theb. was re-

2 E 3

gularly repeated every hour, and at intervals I ordered him a little wine. P. m. his extremities became warm; an equable and moderate perspiration broke out over him, and he was in tolerable spirits.

22d, He was restless and puked once the first part of the night. His medicine agreed with him, and he slept a little towards morning. The pulse was much firmer, he was quite cool, and complained of weakness only. I continued his medicines, and allowed him wine, and mutton broth now and then, without any fat.

23d, He rested well, and had no sever or any complaint, but weakness. I prescribed the bark, a drachm every hour as before, with wine only, which agreed very well with him, and his diet as before.

24th, He had regular stools, without any complaint, but of dejection of spirits. I continued his bark, wine, and diet.

His medicine, and nourifhing diet, were regularly administered, and no alteration happened until the 2d of February, when he complained of his feet and legs swelling towards night. He was otherwise much recovered. I ordered him half an ounce of bark daily, his pint of wine and diet.

3d, The prickly heat broke out over him, and he complained only of weakness, particularly in his loins, and of his legs being swelled at night. No alteration was made in the prescriptions.

5th,

5th, His countenance was rather bloated, though he was greatly recovered; I ordered him the wine infusion of bark, with elix. vitr. twice a day, which he continued for a considerable time after he returned to sentinel's duty on the 8th of February.

In June following, he was feized with fcorbutic fymptoms, and complained much at times, of the weakness and pain of his loins, of which he recovered, and came home in good health.

This man took above a pound of bark in powder; what quantity he used in insusion, I am not certain, but I know it was considerable.

## CASE 2.

M. R., aged about 32, of a thin habit, by carelefsly exposing himself to the sun's rays; and by fatigue on the 16th of June, p. m.; brought on a stoppage of perspiration; and was affected with universal, severe, wandering pains; great lassitude; anxiety; and burning heat in the palms of his hands and soles of his feet. His pulse was full and quick; and the urine, which he voided with heat, was high coloured, and in small quantity. He used the pediluvium; and took the antimonial medicine, with acidulated drink. In the evening, all his complaints and thirst were greatly exacerbated.

17th, He rested ill from great inquietude: he had short partial sweats, with intolerable heat in the palms of his hands and soles of his feet; his thirst was insatiable; the pulse was strong and quick, and the temporal arteries throbbed vehemently. A. m. he was a little relieved, though he had severe head-ach, and the urine, which was less in quantity, was darkish coloured, and quite turbid. He took a purging draught of salts and manna, which purged him well, though he vomited a little. P. m. a remission appeared. He repeated the pediluvium; and antimonial medicine; and drink.

18th, He refled better; his complaints were all more moderate, except the dyfuria, which was more fevere. The urine was very little in quantity, of a very dark colour, thickifh, and full of bloody fibres. He found himfelf very giddy when he got out of bed. I repeated the antimonial medicine a. m. and added fp. nitr. d. drink. At 10 a. m. an exacerbation of the fever and fymptoms commenced, with the head-ach pain acrofs the forehead. P. m. he was fent to fick quarters. Having been favoured with the fubfequent part of his cafe, I have inferted it.

In the evening he was ordered to repeat the pediluvium; the antimonial medicine, with tamarind beverage and fp. nitr. dul. His urine now was neither fo dark coloured, nor fo thick.

19th,

19th, He rested very ill, though there was a remission of the sever and symptoms at midnight. The purge, with the addition of some cryst. tart. was repeated, which operated very well. P. m. he sound himself better; and the dysuria abated. The medicines were repeated at night, as before.

20th, The fever remitted after a tolerable night's reft; he voided his urine easier, in larger quantity, and clearer; yet the head-ach haraffed him. He was ordered a drachm of the bark every hour, with water only, which agreed with him. The head-ach remitted at 2 p. m. and though he had taken an ounce of bark, the medicines and drink were prescribed at bed time as before.

21st, He had no return of his fever; but the pain in voiding his urine did not leave him for a confiderable time; and he continued to take the bark eight days, but after the fourth he diminished the quantity daily.

I have now stated the observations I made on the remittent fever as it arose from the land exhalations; or marsh essuain, on the coast of Africa; and given a faithful account of the manner in which it was successfully treated: except Mr. Roberts and Mr. Fennel's cases; in which bark was not administered, for the reasons mentioned and shown in their respective cases.

Most of the fick, while under cure, were at fea;

fea; fo far as not to be affected or acted upon by the marsh effluvia during their illness \* and cure.

It is evident that the inelegancy or simplicity of the manner in which my patients were treated was no bar to its success. *This* indeed was so perfect as to render any apology for the treatment unnecessary.

I formerly observed, that I was persuaded, by a physician of the old school, before I went out in the Rainbow, not to administer bark in severs so early as I had done on board the Weasel; which persuasion I own, with shame, I paid too much attention to, contrary to my own opinion; and subsequent experience proved I was right. In the cases of all the patients to whom I gave the bark, so early as the third day of their illness, no unfavourable symptom ever occurred; but many from a contrary practice!

After much longer experience, I am fully warranted in recommending the administration of the bark as soon as the *primæ viæ* are emptied; supposing this to be done in a few hours, and that there is a remission; or as soon as a remission appears.

PART

<sup>\*</sup> Doctor G. Fordyce maintains, "that when a patient is once infected or affected with fever, he is no longer susceptible of the infection or infectious aura or vapour, but that, whether he continues exposed thereto or not, his fever will hold on its course to its termination, equally the same, under any supposed circumstances. See his Dissertation on Fever.

# PART VI.

ON THE DYSENTERY.

## CHAPTER I.

Of the Dysentery in different Parts.

#### SECTION I.

The Description of Dysentery at Jamaica.

THE general fymptoms of the patients afflicted with Dysentery at Jamaica, were frequent loose stools; in some cases with, and in others without gripes or any blood; soreness of the belly\*; pain and weakness of the loins; nausea and thirst. The pulse was quicker, and the skin hotter and drier than natural.

When the difease had its course for two, three, or more days before they complained, which was too often the case, the account of its beginning

<sup>\*</sup> It is to be remembered, that their own expressions are often inserted.

and progress, which I got from the fick, was very indistinct; the fymptoms varying according to the manner in which they had lived, and the time they had been ill.

Many were feized at first with chilliness or rigors, retching, bloody stools, violent gripes, twisting of their guts, as if they had been cramped, or contracted into knots; and the pain such, as if the bowels had been pierced with knives; for in all these different ways they expressed themselves. Tenesmus; hæmorrhage at the nose; numbness of the feet; great prostration of the strength and spirits; and faintness, were also some of the first symptoms. The more of these that concurred in one case, the more dangerous the case always proved.

But in whatever manner they were first affected, their cases soon became nearly similar, and apparently differed in degrees of violence only; unless they were relieved by the first evacuations, which, I am forry to say, seldom occurred. Their stools, which at first were large, somewhat excrementatious, with blood in some cases, and in others without any, as I have already observed, continuing so throughout the disease, soon diminished in quantity; and became more frequent, watery, slimy, or of the consistence of mucus, mixed or streaked with blood. In some cases they appeared like the Carnium Letura, and in others like mere fanies.

The gripes and tenefinus continued to increase daily, with very little respite, until the disease either became chronical; or until the strength of the patient was exhausted, and mortification took place. The pain then ceased, their stools ran off involuntarily, and death put an end to their calamity. Such cases were preceded by one or more black, putrid, and very social stools.

In the course of the disease many other alarming symptoms occurred; namely, very hot stools\*; procidentia ani; amazing dilatation in ano\*; a prosuse hæmorrhage ab ano \*; dysuria; suppression of urine, especially towards night; great tension and pain in the abdomen; flatulencies; severe pain about the pubes; vomiting, particularly after taking any thing; vomiting of worms; voracious appetite; aphthæ; sense of great internal heat; pain and foreness of the eyes; tinnitus aurium; wildness in the countenance; great anxiety and restlessness; delirium; hiccup; an hippocratic countenance; deliquium, and cadaverous smell.

Some of these may be reckoned symptoms of the sever; and differed in degree of strength and malignancy amongst them, keeping pace with each other. Towards night there was generally an exacerbation. The pulse was sometimes quick, small, and irregular, and at others very languid, though

<sup>\*</sup> These symptoms have not been taken notice of by any author which I have read.

very often it was not to be depended upon, as it varied with the patient's fatigue in getting out and in to bed: however, it generally fell gradually, and was either very fmall, tremulous, or vermicular, with fubfultus tendinum before death. The tongue, from being white at first, became daily more foul; and at length appeared brown or black; and the teeth became crusted over with fordes. The thirst was generally insatiable. The skin most commonly in the beginning was hot and dry, but towards the fatal termination there were partial and cold clammy sweats, particularly on the face and breast; and the extremities became cold.

#### SECTION II.

On the Dysentery to the Southward of the Equator.

In the Dysentery which happened to the southward of the equator, the sickness at the stomach; the gripes; the pain in different parts, and contortion of the bowels were more violent; and the prostration of strength and spirits were much greater. Some were also attacked with alternate rigors and heats; violent head-ach; vomitings, and had very

very quick and full pulses. Others were at once affected with frequent purgings of blood; and violent gripes, without a feverish symptom. In one case, which proved fatal the third day, a violent pain in the bowels preceded the purging, which was attended with very great prostration of strength, wildness of countenance, and the utmost despondency. And though it was not near so epidemical as the one at Jamaica, it was more malignant; or, as Sydenham \* expresses himself, "of a more sprituous nature."

In the equator dysentery we had only 24 men ill; of whom four died †: one on the 3d, one on the 6th, one on the 11th, and one the 14th day. In the other we had 72 men bad in all; including relapses, of whom nine only died; besides the patient affected with vomica. Four of them died at the hospital; but on which days of their illness I am uncertain. The earliest death on board was on the 9th, but the patient had also an exceedingly bad fever: one died the 20th of a relapse, one on the 22d, one on the 23d, and one, who had frequent relapses, on the 33d day.

These few were the only material circumstances wherein the two dysenteries differed.

<sup>\*</sup> See Swan's translation of his works, p. 156, par. 6.

<sup>†</sup> Two more of them died at Port Royal hospital,

## SECTION III.

# Reflections on the Dysentery.

Of all the difeases which attack a ship's company, the Dysentery, if not the most fatal, is in my opinion equally fo with any other; and by far the most loathfome. The constant doleful complaints from the various violent pains of the bowels; from gripes, and tenefinus; from the continual noxious fetor about the fick, as well as from that of the necessary buckets; not to mention how extremely distressing such objects must be to the sight; in fpite of all the means which can be used, are evils peculiar to dyfentery alone. Yet great as they are, they are undoubtedly much increased when the weather is fo bad as not to admit the lower deck ports to be up in large ships, or the hatchways in fmall ships to be unlayed. The foul air then being much more confined around the fick, and where the well people lie, is confequently drawn into the lungs again and again by respiration, and foon becomes more foul and noxious, which renders it unfit for the falutary purposes of both the fick and the healthy.

This circumstance is perhaps a much more powerful agent in enfeebling the seamen; in depressing

preffing their fpirits during bad weather; and in rendering the dysentery epidemic in the ship, than the inclemency of the weather to which they are exposed upon deck in their watches. It is very pleasing to observe the immediate alteration which appears in the countenances of the men, when the ship is well washed and aired, and when they have cleaned themselves after bad weather. From being quite fallow and dejected, they acquire a healthy look, and fresh spirits.

But the poor dysenteric patients suffer more particularly from being so weak, that they are unable to get on deck to enjoy a moment's fresh air in fine weather, and much less in bad.

As it is to be apprehended that infection might be communicated to the reft of the ship's company by suffering the slux patients to ease themselves in the common seats of the head, they ought not to be suffered to go there upon any account, admitting they are able to go. When they arrive at a convalescent state, one side of the head should be allotted for their use only, and the well people prohibited from going thither, under the pain of being punished\*.

If cleanliness in the fick births be neces-

<sup>\*</sup> But the best mode for the sick, and for the rest of the ship's company, is to include one of the round houses with the sick birth. This will always be found the most appropriate convenience.

fary in other difeases, there seems to be yet a more indispensable necessity for their being kept remarkably clean in the dysentery, in consequence of the reasons before noticed \*\*

\* But little can be added to what Dr. Lind has said on the subject, in his Essay on the most effectual means of preserving the health of seamen. An essay which has very deservedly done that eminent physician great honour as well as his other valuable writings.

# CHAPTER II.

On the Treatment of Dysentery.

## SECTION I.

Observations on different Medicines.

WHAT renders the Dysentery on board of ships more distressing, is, that no certain method of curing it has yet been discovered \*.

The bark, from its well known properties, and effects in various diseases, seems to be the most fuitable medicine for curing dysentery, after evacuations have been administered; but I am forry to fay, that in the manner which I made trial of it, I found it came far short of my intention, or expectation. It is true, I did not give it in a recent case, after the first vomit and purge, because I apprehended that the early use of aftringents was abfolutely improper, and would have increased the inflammation, instead of curing the difeafe. Had I fortunately, however, taken notice

<sup>\*</sup> I am now speaking in 1772, 3 and 4.

of that passage in Dr. Lind's Treatise on Hot Climates\*, where, in speaking of the method of curing the flux, "he recommends a mixture of bark with opium, after vomiting and purging the patient," I certainly would have laid aside my own prejudice against the early use of it; and have given it a fair trial. However, I must acknowledge, that I found it preferable as a corroborant in the declension of the disease to any other tonic.

Ipecacuan. performed nothing as to curing the dyfentery, to entitle it to the character of a specific; and most probably for the reason which Sir John Pringle assigns.

Rhubarb toafted or untoafted, fo ftrenuously recommended by the learned Huxham ‡ was far from being of that efficacy which he found it.

Diafcordium with opium, another favourite medicine of that great author § in the dyfentery, was not more efficacious than the former; nor was theriaca. Opium, which was the immortal Sydenham's || principal remedy i the cure of dyfentery, was barely a palliative in the two dyfenteries under our immediate confideration.

Terra

<sup>\*</sup> See p. 276.

<sup>†</sup> See p. 261 of his Observations on Diseases of the Army.

<sup>†</sup> Vid. Observationes de aere et Morbis epidemicis, tom ii. p. 106.

<sup>§</sup> Ibid. p. 100.

<sup>||</sup> Swan's translation, sect. iv. chap. 3.

Terra Japonica was of no real fervice. How proper foever the great Boerhaave's \* method of treating the intestines, in an inflamed state, may be, in the beginning of dysentery, other medicines are certainly requisite to complete the cure. Besides, the inconveniences that attend the use of sometations and injections, which, to be of any real service on board of ships, must be frequent, especially when many are sick, are insuperable.

As to the femiruba or lign. campech. I had neither of them on board to make trial of them.

#### SECTION II.

# The Method in which the Dysentery was treated.

I DID not judge it proper to let blood in the dyfentery, except in a case at Jamaica, which commenced with hæmorrhage at the nose. As the patient had been no way reduced by any preceding illness, to occasion it, I thought this an indication to let a few ounces. In some other mild cases, which occurred on our passage from Jamaica to England, when our latitude was pretty high,

\* Vid. Aphorism 966, and 976.

and the weather cool, I took away blood sparingly, because some particular symptoms, in the course of the disease, though not at the commencement, seemed to require it. These patients, indeed, all recovered, though I do not by any means ascribe this to their being let blood, but entirely to the savourableness of the attack of the disease; for I am firmly of opinion, that general blood letting in the dysentery in hot climates would be as bad practice as in the remitting sever.

The cure was begun by administering ipecacuan. as an emetic. In the Jamaica flux, I generally gave from ten to five and twenty grains of the powder at one dose. Though it always vomited the patient well, and frequently procured him a more copious stool or two than usual, I found that it operated much better by stool, when I gave five or fix grains every hour, and repeated that quantity three times, after Sir John Pringle's \* method. In this manner, therefore, I generally prescribed it in the equator flux; and in the mean time the patients drank thin gruel, barley water, chamomile tea, or water with toast, at pleasure †. At night I always gave an opiate from the first of their complaining, to ease the violent pains, and procure some rest.

If the patient complained in the morning, and

<sup>\*</sup> See the place of his Observations already cited.

<sup>†</sup> Huxham, besides many others, recommend water. Vid. loc. citat.

the operation of the ipecacuan. was over, I gave him the fame day, at Jamaica, from one to two fcruples of rhubarb; very feldom toafted. ham, in his account of the dyfentery which raged at Plymouth in 1743, gives rhubarb the preference to all purges in these expressive words: " Omnium fanè optimum est rhabarbarum, quod " exhibendum est sæpiùs (tostum id semper si ab " Indiis venit orientalibus) cum nucis moschatæ, " aut cinnamomi pauxillo \*." I changed the rhubarb purge in the equator flux, for the fal. cath. amar, which I found to act more powerfully, and with greater eafe to the patient. I therefore generally gave an ounce of fal. cath. amar. diffolved in half a pint of thin warm gruel, divided into three or four parts; one of which he took every half or three quarters of an hour, until it was all taken; allowing thin demulcent drink to work it off; and in the evening the opiate. The one which I made use of, was either folid opium, or tinct. theb. But when the vomit was taken p. m. the purge was administered next morning.

If the gripes were much relieved by the vomit and purge, and the flux had abated the day after; whether it was the fecond or third day of complaining, I gave no other medicine than the opiate morning and evening, and allowed the patient demulcent drink at pleasure \*. If, on the contrary, the gripes continued violent, the stools small and frequent, and the patient had a frequent inessectual desire of going to stool, I repeated the purge daily, until these complaints were relieved, and the opiate according to circumstances.

When my patients were fufficiently purged, and the inflammatory fymptoms moderated, I endeavoured to reftrain the flux by fmall doses of ipecacuan. and rhubarb, with fmall doses of opium, three or four times a day. Or gave diafcord cum opio pulv two drachins to half a pint of water sweetened with fyr. com. made into a mixture; a spoonful or two for a dose every two, three, or four hours, and the opiate at bed-time.

But after the patient appeared to be recovering, it too often happened, that an exacerbation came on, either from the difease having been only palliated; or more frequently, perhaps, from some irregularity of the patients, and the neglect of the attendants. I was therefore obliged to repeat, again and again, the purges and ipecacuan. after I had begun to administer aftringents.

When the difease was violent and protracted, it became necessary to use the white decoction; opiates more liberally, to alleviate the violent pain; emol-

lient

<sup>\*</sup> In this I imitated Sir John Pringle; see his Observations on the Dysentery.

lient formentations for the abdomen; emollient and anodyne clyfters composed of decoction of lint seed; or solution of starch and opium; aftringent and antiseptic clyfters; the decoction of bark; or of cascarilla—or of balaustine flowers cum opio, and to give aftringents internally with wine: viz. the terra Japonica, bark and cascarilla, together with opium; and white decoction for drink. But they all proved often ineffectual. To illustrate what I have said upon this head, I shall add a number of the cases of both fluxes.

#### SECTION III.

Cases of the Dysentery at Jamaica.

#### CASE I.

WILLIAM HUTCHINGS, marine, aged about 30, who never had been in a hot climate before, complained, on the 10th of June 1773, p. m. of having a flux upon him, and that he was violently griped at times. His ftools were watery, his fkin was drier and hotter, his pulfe quicker than natural; and he was very thirfty. I ordered him the ipecacuan. vomit, half a grain of opium at night, and thin gruel or barley water for drink.

2d Day, he did not find himfelf relieved, and took half a drachm of rhubarb; and the opiate at bed time. The rhubarb did not operate well.

3d, He had a bad night; his stools were small, frequent, and bloody; the gripes were violent sometimes across the abdomen; at others fixed in a point; and the tenesmus harassed him. I gave him pulvad. rhei.  $\theta$  ij. nuc. mosch. gr. x.; and the opiate at bed time.

4th, He rested better, and was easier, after having had more copious stools. I prescribed ten grains of rhubarb, and three grains of ipecacuan. three times, which gave him several pretty large stools; and the opiate at bed time as usual.

5th, A. m. he was much better. P. m. the griping became more fevere, and the stools more frequent. I ordered him four small doses of rhubarb and ipecacuan.; and the opiate at night.

6th, He rested well the first part of the night, and was better. I repeated his medicines.

7th, He continued much the fame. There was always an exacerbation p. m. I ordered half a drachin of rhubarb, and his opiate at bed time.

8th, He had a good night, was much better, and took his medicines as on the 5th, with decoct. alb.

9th, The griping, when at stool, which was often, became very fevere. I continued his medicines.

10th, He continued much the fame; but the pulse

pulse was quick and small; and thirst insatiable. I repeated the purge and opiate.

11th, He was rather better. I prescribed pulv. ipecacuan. gr. vi. twice, which puked him, and gave him some stools; and repeated the opiate at night.

12th, There was very little alteration; and he complained of difficulty of breathing p. m. I ordered the diafcord mixture every three hours; the decost alb. and the opiate.

13th, He breathed eafy, and the pulfe was pretty regular; though his countenance was wild; and his complaints continued. His ftools were mucous, mixed with little blood. I continued his medicines and decoction.

14th, No alteration for the better appeared; nor was any made in his medicines.

15th, 16th, The flux still continued, and he was much reduced. I prescribed the following draught every four hours, and his opiate at night. Twenty grains of the powder, and half an ounce of tincture of bark, in three spoonfuls of water.

17th, He rested very ill in the night. Besides the usual symptoms he was very severish the first part, and his stools were small and frequent. I ordered him pulv. rhei, gr. xxxv.; calomel, gr. ij. which purged him well; and he took his opiate at night.

18th, He was very weak and thirsty, though in other respects much better. I prescribed as on 15th, and 16th.

19th, He continued better, was hungry and in good fpirits. I repeated his medicines, and allowed him fome weak mutton broth. P. m. his ftools were frequent, and the gripes troublefome.

20th, No alteration. I continued his medicines, and broth, and allowed a little wine; all of which agreed with him.

21ft, He was recovering, and complained little. I ftill ordered his bark, opiate, and diet.

22d, As he lay in his hammock, a. m. after having strained a good deal upon the bucket for a stool, an immoderate hæmorrhage, without pain, proceeded ab ano, which increased upon the least motion, and wet all his bedding before he knew of it. could not be perceived on examination whence it proceeded; nor could it be stopped with tents dipped in ftyptics, and introduced in ano. Opiates were added to his draughts. I ordered an injection of a strong decoction of balaustine flowers with tinct. theb. to be administered, which, upon being repeated, entirely reftrained the hæmorrhage; and when the injection returned, there was no blood mixed with it. The lofs of blood weakened him greatly, yet his appetite, which was in a manner voracious, continued. P. m. he was eafy, and had no ftool.

23d, He was very quiet all night, and had only one stool without any blood. The pulse was thready and tremulous, and the countenance ghastly. I ordered the bark, wine, and diet to be continued.

P. m. his extremities became cold; he was restless with his hands, picking himself and his bed clothes; hiccup harassed him; and he died at 9 o'clock\*.

#### CASE 2.

MICHAEL JOHNSON, feaman, aged about 48, complained, the 18th of June, of flux; very fevere griping; and of violent pain in his bowels, fometimes in one place and fometimes in another. His ftools were bloody. I ordered an emetic, and an opiate at bed time, with demulcent drink.

2d, He was no better, and complained of fevere pain in his loins. I prescribed pulv. rhei, 3ss. the opiate, and drink. P. m. his medicine did not purge him well.

2d, He was much the fame. I repeated the rhubarb and opiate.

4th, He was no easier. I ordered him pulv. ipecacuan. gr. vi. three times, which purged and vomited him very well; and repeated the opiate at bed time.

5th, He was very uneafy. The abdomen was fwelled and tenfe; the ftools were finall and frequent; and the tenefmus was violent. I ordered

<sup>\*</sup> I am fully of opinion that the hæmorrhage occasioned this man's death.

the rhubarb with ipecacuan, three times, which purged him very little, and the opiate at night.

6th, The abdomen was less and soft; but the other symptoms continued the same. I ordered three small doses ā gr. vi. of ipecacuan.; and the opiate at bed time.

7th, He was much easier, and had less purging. I gave him farinaceous drink and the opiate only. P. m. he was feverish; and the swelling and tension of the abdomen returned.

8th, He had no fever, and his abdomen was the fame. I prescribed as on the fixth.

9th, He had a tolerable night, after having been well purged with the ipecacuan. The abdomen was foft, and he complained of great weakness. I ordered the diafcord. mixture.

10th, He was much better, though his flux continued. I repeated his mixture and opiate.

11th, There was no alteration until p. m. when the fwelling and tenfion of the abdomen returned. I continued his mixture every three hours, the decoct. alb. and opiate.

12th, He was much the fame, and had fevere gripes and pain about the bottom of his belly. I repeated the fix grains of the ipecacuan. three times, which operated chiefly downwards, and relieved him. After eating broth, the fwelling and tenfion returned.

13th,

13th, He was better, though very weak. I ordered him his mixture, drink, and opiate.

14th, He complained of fickness, and pain at the stomach. I prescribed gr. x. of ipecacuan. and the opiate at night.

15th, He complained as on the 12th; and took the gr. vi. of ipecacuan. three times, which brought away feveral fcybala.

16th, He complained chiefly of foreness in his bowels and weakness. I ordered the mixture as before; and the opiate at night was gradually increased.

17th, He continued better, but had pain in the left fide of the abdomen. I repeated his mixture.

18th, He was troubled with flatulency in his bowels, which paffed per anum. He took the mixture as before.

19th, 20th, 21st, He was still recovering, and continued the mixture.

22d, I ordered the decoction of bark and eleuther. four times a day; his opiate at night; which he took regularly until the 26th with wine, when he returned to duty.

This poor man relapfed when we got to the northward, and the weather became cold, and when we arrived in England he was fent to the hospital.

## CASE 3.

THOMAS TILESLEY, marine, aged about 30, came from Jamaica hospital a few days before, as cured of flux, and complained again, the 19th of June, that his flux had returned the day after he had left the hospital. His stools were very frequent; he was severely griped; and the tenesmus very painful. I ordered him an emetic, in two hours after, pulv. rhei, 3s. and an opiate at night.

2d, He was very little relieved. I repeated the rhubarb; and the opiate at night.

3d, He had less pain; but his stools were small, frequent, and slimy. I repeated the purge, and opiate.

4th, He rested ill from purging, and violent griping. I ordered six grains of ipecacuan. three times; and the opiate at night.

5th, He was much the fame; and complained greatly of suppression of urine, with pain about the pubes, which had harassed him several days, although he did not mention it.' I prescribed two spoonfuls of diascord. mixture every three hours; the white decoction; an emollient somentation; and the opiate at bed time.

6th, He was much the fame. The medicines and fomentation were repeated.

7th,

7th, A. m. he complained of being griped; and took the bark as Hutchins did on the 1th day of his illness.

8th, He was very restless and hot in the night, from severe gripes, and frequent small stools. I ordered the purge and calomel\*, gr. ii. which operated well; and an opiate at bed time.

9th, He was very feverish and thirsty in the night; but the other complaints were easier. I repeated the bark and opiate as before. The suppression of urine was relieved.

10th, He had frequent and ineffectual folicitations to the ftool; and the tenefmus continued trouble-fome. I ordered the purge as on the 8th. P. m. when at the ftool, he puked a large lively round worm.

11th, He was much better. I prescribed the bark and opiate.

12th, He was recovering, and I repeated his medicines. He continued the wine and white decoction.

13th, He complained of fickness at his stomach. I gave him ten grains of ipecacuan, which puked him; and afterwards repeated the bark; and opiate at bed time.

14th, He was pretty eafy, and continued his medicine regularly, until the 24th, when he return-

\* Huxham prescribed it, vide p. 100, tom. ii. Observat, de Aere, &c. as also Sir J. Pringle and Cleghorn, to assist the rhubarb.

vol. I. 2 G ed

ed to duty. He relapfed from the fame cause as the preceding patient, and was sent to the hospital, very much reduced.

# CASE 4.

LUKE COLEBY, feaman, aged about 44, a little infane at times, complained, the 21st of July, latitude at noon 31° 21" of flux, which had feized him two days before. His stools were frequent; small and watery; accompanied with very severe griping, and twisting of his bowels. I ordered him six grains of ipecacuan. three times; which puked and purged him well; an opiate at night; and demulcent drink at pleasure.

2d, He was no better. His bowels feemed to be cramped, or drawn into knots; and fometimes as if they had been cut acrofs the abdomen; or pierced with knives. I repeated the medicine as yesterday; and the opiate twice. P. m. he was well purged again.

3d, He found himself much easier. I ordered him the opiate, and drink.

4th, He continued better. I prescribed four small doses of rhubarb and ipecacuan.; and the opiate with white decoction.

5th, He complained of being much griped and purged, and of the tenefinus. I repeated the ipecacuan, as on the 1ft.

6th,

6th, He found himfelf very little easier. I ordered the powders as on the 4th.

7th, There was very little alteration, and he continued his medicines.

8th, The abdomen was very fore; and he was much dejected. I repeated his medicines and drink. P. m. he had always an exacerbation more or less.

9th, His complaints were more troublesome. The diafcord. mixture was repeated every two hours, and the opiate morning and evening.

10th, He was easier, though much dejected. I continued the mixture, decoction, and opiates, and allowed him a little red port.

11th, He continued better, after perspiring greatly in the night, about the head and neck. His medicines and wine were administered.

12th, 13th, 14th, and 15th, He was recovering. I allowed him wine; ordered Peruvian bark zss. in a little wine, four times a day, and the opiate at night.

16th, He was eafy; but when at stool the griping violent, and tenefmus haraffed him, especially p. m. I prescribed a dose of rhubarb, his bark and wine afterwards, and the opiate at night.

17th, 18th, 19th, 20th, 21ft, and 22d, He could hardly be faid to have recovered. He continued weak; much dejected, with an exacerbation towards night. His ftools were mucous, and

2 G 2

extremely

extremely hot. Flour boiled thin with water, to which a little wine, fugar, and cinnamon were added, was the only diet he would take; and he was foon purged after eating it. I repeated the bark and wine four times a day, and the opiate as before.

23d, He was much the fame. I ordered him a dofe of rhubarb, and the opiate at night.

24th, There was no alteration. The diet, drink, and opiates, were continued. P. m. he was feized with rigors.

25th, He had a tolerable night. I gave him four finall dofes of the ipecacuan. and rhubarb.

26th, He continued better. I prescribed an ounce and a half of wine infusion of bark, four times a day, with the opiate and drink as before. P. m. the rigors returned with fever.

27th, He refted pretty well last night. He took half a drachm of the bark, with wine infusion of bark one spoonful, in water, every two hours, besides his diet, wine, and opiate.

I perfifted in this plan until the 36th day of his complaining, when I fent him weak and emaciated to the hospital. The flux was not quite gone. He was very untoward; thinly clothed; and frequently lay on the deck in the course of his illness.

#### CASE 5.

RICHARD ENOCH, marine, aged about 33. was feized, the 29th of July 1773, with chilliness; rigors; and fickness at the stomach; succeeded by fever; head-ach; thirst; flux; and severe gripes. He complained the 30th, latitude at noon 41° 20"; and took a dofe of falts. I did not fee him before the 31st. His pulse was then quick and rather foft; skin dry and hot, with head-ach and fickness; he was very thirsty; frequently purged; with violent gripes, and the tenefinus was very painful. I ordered him the ipecacuan. to puke him, which operated well. P. m. his complaints were not relieved, and the tongue in the middle was brown and rough, with a red edge. I ordered a draught of the sp. Minder. with ess. antimon. and tinct. theb. fweetened; and acidulated drink.

4th Day of his illness, he rested very ill from the flux and griping, and perspired little in the night; the sever and symptoms were more moderate a. m. though the slux and gripes were not relieved. His stools were mucous and streaked with blood; his countenance was bloated, and rather wild; and he complained of his toes being cramped. I prescribed pulv. rhei, gr. xxxv. which purged him well. P. m. an exacerbation came on; and the opiate was repeated at bed time.

2 G 3

5th, He passed a bad night. His pulse was slower and his countenance slushed; he talked incoherently; was sick at the stomach; and the slux with its symptoms continued very troublesome. I gave him three small doses of ipecacuan which operated well both by vomit and stool; but he was scarcely relieved. I added to his draught more tinct theb.

6th, He rested the first part of the night; but afterwards was purged very often, and violently griped. He was very fractious; his countenance was fallen; he found himself much hotter; more restless at times; and thirsty. I ordered a drachm of the cortex in a little red wine every two hours, and an opiate morning and evening. P. m. the flux continued; hiccup, to which he was subject, harassed him. He drank some cossee which his messimates gave him. At 7 he had a perspiration on him, and seemed better. His medicines agreed with him.

7th, He complained lefs, after having been eafy and little purged in the night. His pulse was quick and small; he was extremely weak; the tongue was red, and he had a stupor on him. I ordered the bark with wine to be repeated every hour. P. m. he appeared more stupid; the purging continued; he complained of no pain; was very restless, and cried for air; and for water to drink. Instead of the opiate morning and evening, I added tinct. theb. gut. v. to every dose of his bark.

8th,

8th, He had only one stool in the night; complained of no pain; his countenance was still wild; he was delirious and unmanageable. P. m. he was worse, and swooned away twice to-day, when got out of bed to the bucket. I applied a large blister a. m. between his shoulders; ordered him eight grains of camphor every four hours, and continued his bark, with wine only, every two hours, without the tinct. theb. and allowed him wine and water, with toast, for drink.

9th, He flept little from inquietude. He muttered, and complained of his blifter; and his pulse was small and irregular. A. m. I ordered him camphor, gr. x. and the wine to be continued. There was a cadaverous smell about him p. m. and he had the hippocratic countenance. Five p. m. I prescribed mosch. gr. x. in a draught, applied blifters to his ankles, and continued his drink.

At 10 o'clock the hiccup was very troublesome; he had convulsive rigors on him at times, and respiration was laborious. I gave him twelve grains of musk in a draught, and supplied him with drink.

10th, His medicines were ineffectual, and he continued growing weaker until 3 a.m. when he expired. Calculating the time, he died on the 9th day. From the prodigious fetor about him, he had certainly voided purid, involuntary stools before his death; which circumstance prevented

2 G 4

me from looking at his body before and after he died. I think it more than probable there were external marks of putrefaction on it.

## CASE 6.

Daniel Bingham, feaman, agedabout 43, having been very ill of dyfentery, was fent to Port Royal hospital, and returned uncured; but recovered on board. He relapsed soon after, and was bad a fortnight before I knew of his illness. When I saw him, on August 8th 1773, latitude observed 45° 35", his appearance was shocking; his countenance was quite fallow and much bloated; the swelling emphysematous; his voice weak and hoarse; his throat was fore; he was very often purged, and violently griped; thirsty; had no appetite; was extremely weak, languid, and desponding; and his pulse was very feeble. As it was then late p. m. I ordered him only an anodyne, and drink.

2d Day of my feeing him, he was no better, and complained of fickness at the stomach; and tenesmus. I prescribed fix grains of ipecacuan. twice; and chamomile tea to drink. He was vomited and purged, and had some ease. I allowed him a little wine, repeated his opiate at night, and applied an epithem to his throat.

3d, He had a bad night from purging. I gave him pulv. rhei, 3s. nuc. mosch. gr. x. continued his wine, repeated the opiate, and renewed the epithem.

4th, He was very reftles; and complained much the first part of the night, but was easier a. m. though none of the symptoms were removed. I erdered him rhubarb six grains; of emetic tartar half a grain; theriac. androm. sive grains, in a draught, four times a day; and the wine and opiate at night.

5th, The flux and gripes were violent the first part of the night; he had no perspiration on him, and was weaker. I continued his draughts, wine, and opiate.

6th, There was no alteration for the better; nor was any made in his prescriptions.

7th, He was easier than usual the sirst part of the night; but got out of bed insensibly the latter part; and complained of much pain in the abdomen. A. m. he had some sleep. When he awoke his tongue was black; his teeth were crusted over with sordes; and he was very thirsty. His pulse was extremely weak and irregular; and the emphysematous swelling being almost gone, he appeared emaciated. I applied a blister to his back a. m. and endeavoured to support him with wine. He died at 6 p. m \*.

I can-

<sup>\*</sup> Was this case what authors term scorbutic dysentery?

I cannot properly infert the cases of the other two men who died of the Jamaica Dysentery, because they were a considerable time at the hospital, whence they returned, and continued very ill until their death. They both died with vomiting, suppression of urine, and black, putrid, and very fetid stools \*. They took bark, were allowed red port, had opiates, emollient somentations, and antiseptic injections, with light diet.

#### SECTION IV.

Cases of the Dysentery to the Southward of the Equator.

#### CASE 1.

Thomas Watts, marine, aged about 32, who never before had been in a hot climate, was affected, March 31st, 1774, p. m. with flux, and complained next day, lat. 00° 49" fouth, of bloody flux, with violent gripes and pains in his bowels. He was fick at stomach; thirsty; and his pulse quicker than natural. I prescribed pulvipecacuan. gr. v. three times, which operated well by voinit; and an opiate at night, with drink.

<sup>\*</sup> Are these symptomatic of the rectum being gangrenous?

2d, He had a very bad night, with flux and gripes. His bowels felt as if contracted into knots; and the tenefinus haraffed him exceedingly. I prefcribed pulv. rhei, 3ii.; fomented the abdomen; and repeated his opiate at night with demulcent drink.

3d, The fymptoms continued violent; his pulse was quick; and thirst instatiable. I ordered him a dose of sal. cath. amar. and the opiate at night. P. m. he was well purged.

4th, He was easier in the night, unless when at stool, which was often, and he was then violently griped. A. m. he complained of his bowels being very fore. I repeated his purge, opiate, and drink.

5th, He refted tolerably; and was much eafier, with a moderate perspiration over him. I gave him only demulcent drink, and the opiate at night. P. m. he eat some mutton broth without being sensible of it.

6th, He was often purged, feverely griped, and the tenefinus was harafling in the night. I repeated the purging falts in fmall quantity every half hour, which procured him fome large flools, with fcybala, and relieved him greatly. He took the opiate at night.

7th, He was frequently purged and weak; but was much easier; and had a little appetite. Eruptions broke out on the left cheek and side

of the chin. I ordered him four fmall doses of rhubarb and ipecacuan; a very light diet; and the opiate as before. P. m. as foon as he eat any thing he purged.

8th, The flux continued, though he was eafy, and perspired freely. I repeated the powders; regimen and opiate, which was tinct. theb. gut. xl.

9th, He had an eafy night, perspired, and was hungry. I made no change in the medicines. P. m. he had fruitless desires for the stool.

10th, The flux and tenefinus continued; and the eruptions about the mouth looked angry. I ordered him the diafcord. mixture every two hours, with diet, and the opiate at night.

11th and 12th, He was confiderably better, and took his medicines.

13th, He was often purged in the night, and his bowels, he faid, were drawn together. I ordered the fal. cath. amar. as on the 6th, and the opiate at bed time. He was not fufficiently abfermious.

14th and 15th, He was very weak, though much better. I repeated the diafcord. mixture and opiate, with his regimen.

16th, He was restless and much frightened the first part of the night, in consequence of a man dying. I therefore repeated his opiate with a little wine. A. m. he was better, and took his medicine as before.

17th

17th and 18th, He recovered flowly, and no alteration was made in his medicines.

19th, He had feveral bloody flools in the night without gripes. I ordered him pulv. cort. Peruv. 3 fs. every two hours, with a little red wine, and one grain of opium at night.

20th, His bark purged him. Tinct. theb. gut. viii. was added to every dofe.

21st, He had an indifferent night with purging. I prescribed two scruples of the bark every two hours, with an opiate and wine, and the diascord. mixture at times, with light diet.

I followed this method regularly until the 27th, without gaining any ground. He was by no means abstemious or careful in his diet; and whatever he eat, immediately passed through him. Being now purged and griped, I ordered him rhubarb gr. xii. ipecacuan. gr. v. theriac. androm. gr. viii. in a draught; it purged him well, and carried off the griping.

I again put him on the bark, wine, and opiates; and a light diet. Notwithstanding which, the flux and weakness continued until the 37th of his illness, when I fent him to Antigua hospital.

# CASE 2.

Daniel Marrow, marine, aged about 34, who never before had been in a hot climate, was attacked with flux the 1ft of April 1774, but did not complain until the 2d, lat. observed 1° 16" S. The symptoms were the same as in the preceding case; and he was much dejected. I prescribed the emetic, opiate, and drink.

2d, He was violently purged and griped all night; his thirft was infatiable; and his pulse quick and full. I ordered him the fal. cath. amar. which purged him well, but did not relieve him. The drink and opiate were repeated.

3d, He fuffered exceedingly with inquietude in the night, from the violence of the fymptoms. A. m. he was easier, and perspired; yet his skin was disagreeably hot; and an uneasy sensation remained on the singers after feeling his pulse. I repeated the purge and opiate as before, and indulged him with toast and water at pleasure, which he was desirous of for drink.

4th, He was eafy only while the effects of the opiate remained. Afterwards, he faid, his bowels were twifted, drawn into knots, and feemed to be cut and pierced with knives; and the tenefmus haraffed him. I repeated the purge and opiate, and continued the drink. P. m. he was eafier, after being well purged.

5th,

5th, He had a better night, was easier, and his stools more copious; but he was very weak, and dejected. A little sago, which he requested and eat, did not agree with him. I gave him drink and the opiate only.

6th, The pain and tenefmus were easier, though he was very weak from incessant purging. He was anxious for sago. Instead of the diascord. mixture, which I ordered, three small doses of ipecacuan. were given him, and the opiate at night.

7th, He was greatly fatigued in the night, with a frequent and fruitless desire for the stool. He was thirsty, much dejected, and his pulse was quick and small. I prescribed forty grains of rhubarb; eight grains of theriac. androm. in a draught; and the opiate at night.

8th, He was much worse; the fruitless desire for the stool continued, without griping; he had an inordinate craving and anxiety; lay on his face; his countenance was wild; his tongue covered with a light brown mucus; and he wandered. Emollient clysters \* were injected, and the abdomen was fomented. I ordered the diascord. mixture

<sup>\*</sup> My mate informed me, that when he gave him the first injection, the anus was so much ditated, he could put all his fingers into it; that a bloody sanies was dripping from it; and that scarce any of the injection was retained. He complained of great pain too in receiving it, and there seemed to be an obstruction in the rectum.

every two hours; the opiate to be repeated every four hours; allowed him red wine; and gave him the white decoction, or water and toaft, for drink.

9th, All his complaints were the fame, and the stools were only a little fanies, though he said he was better; he continued to lie on his back. The medicines were continued. The injections were a strong decoction of the cortex, and eleuther. with opium. P. m. the sever increased; his tongue was black; his teeth were crusted over with sordes; and the other symptoms, with the desire for the stool, continued.

10th, He passed a very bad night, and became worse. The medicines were continued; a little warm wine was allowed him at intervals, and the antiseptic injections were repeated. P. m. he had still an ineffectual desire to ease himself; was extremely weak; and the extremities were cold. At eight o'clock a hiccup came on, with convulsive catchings; and he died at midnight.

## CASE 3.

Daniel Waughan, marine, aged about 30, who had never before been in a hot climate, was attacked, on the evening of the 12th of April 1774, latitude at noon 4° 41″S. the day on which the preceding patient was buried, with excruciating pain in his bowels, which was foon followed by purging.

When

When he complained in the morning of the 13th, the flux and griping were very fevere; he was exceflively dejected, and afraid of dying. I ordered him three fmall dofes of the ipecacuan which vomited and purged him well, an opiate at night, and demulcent drink. P. m. he was easier.

2d, He continued easier; but the despondency and dejection remained. I prescribed the fal. cath. amar. which purged him, and the opiate at bed time. P. m. he was seized twice with deliquium. I allowed him wine now and then.

3d, He had a very bad night, from frequent bloody ftools, but without pain or griping; he was very fick, and feized again with deliquium a.m. His countenance appeared wild and frightened; he had fcarcely any pulfe; and there was a cold clammy fweat over him. I ordered him cardiacs with wine, and applied a large blifter between his fhoulders. P. m. he was comatofe; he answered questions very indistinctly; and was very desirous of getting frequently to the stool. His skin became hotter a little before nine o'clock, when he died. Fear alone feemed to have hurried him off. He had been affected with siphilis, I was told, and took medicines of his own.

## CASE 4.

Benjamin Nixon, feaman, aged about 39, a hard drinker, on the evening of the 16th of April, latitude at m. 3° 4″ S. complained of flux; of fevere gripes; of vomiting at times; and great thirst. The pulse was quick, and his skin hot. I ordered the ipecacuan. in small quantities; an opiate at night, and drink. P. m. the ipecacuan. brought up much bile, and purged him a little.

2d, He had a very restless night, and was no easier. I prescribed the salts; thin gruel; an opiate at night; and the white decoction. He was very thirsty p. m. and had frequent small slimy stools, with less griping.

3d, He found himself no better after much inquietude in the night. I repeated the purge; drink and opiate as before. P. m. his bowels seemed to be contracted to one place; the griping was violent; and the flux continued, with painful tenesmus.

4th, He was no easier; very weak and much dejected. I ordered him a grain of opium every four or six hours, as the pain required; fomented the abdomen; and gave him the common emulsion and white decoction for drink. P. m. his thirst was less, and he found himself easier.

5th, He was much better. I repeated the opiates and his drink only. P. m. the violent gripes

were feldom, though his flools were frequent, but more copious, and voide d with less pain.

6th, He found himself worse. I prescribed three small doses of ipecacuan, which vomited him a little, and purged him well, and the opiate at night. P. m. he was much easier.

7th, He rested tolerably until midnight, when the griping began to be violent at times. I repeated the opiate twice, and continued his drink. P. m. he was not griped, but very weak.

8th, There was hardly any alteration. I ordered the diafcord. mixture every two hours, and opiate at bed time.

9th, He was better, though very weak. He got the rhubarb, ipecacuan. and theriac. draught, three times, instead of the mixture which I prefcribed. P. m. he did not find himself worse.

10th, He had a cold fweat at times on the face; though the fymptoms were easier; and his fpirits were tolerable. I ordered the mixture; the opiate twice; and allowed him a little red port.

11th, He continued better, though very weak, and was disturbed in the night by a man's dying; his spirits were good, and he had an appetite. I repeated his medicines, wine, and drink. P. m. he complained of slight griping.

12th, P. m. he became much worse; was severely griped; retched when at stool; was much dejected, and his pulse was quick and small. His

2 H 2

mixture.

mixture, opiates, and wine, were given him regularly, and emollient clyfters with tinct. theb. injected.

13th, He had a bad night. A. m. he was eafier, the retching being gone. I ordered him the terra Japonic. in the form of a mixture, with tinct. theb. aq. cinnamon. fp. fyr. fimp. et aq. commun. every two hours; befides the wine at intervals, and antifeptic and aftringent clyfters to be administered. P. m. his stools became more frequent; the countenance hippocratic; his pain ceased; and hiccup came on with extreme weakness.

14th, The hiccup increased. I repeated the medicines and wine frequently. P. m. he spake little; was extremely restless and had a large putrid stool. The injections were continued, and a musk draught given him every four hours.

15th, He was speechless; but took his medicines until 8 p.m. when he died.

#### CASE 5.

Dudley Blackey, feaman, aged about 28, on the 19th of April 1774, lat. at m. 1° 5" S. complained that he had been purged for two months past. However this might be, he was much emaciated; very giddy; his eyes were painful; he was much griped when at stool; and the pulse was small and quick. I ordered him ipecacuan.

gr. v. three times; an opiate at night; and demulcent drink.

2d Day of his complaining, the flux, gripes, and tenefmus, were very troublefome. I prescribed the fal. cath. amar. \(\frac{7}{3}\)i. and the opiate. P. m. he was much better, having been well purged.

3d, He was much the fame. I gave him the drink and opiate.

4th, His complaints and purging were more troublefome. I repeated the ipecacuan as on the 1ft, which vomited him a little; purged him very well, and relieved him much. He took his opiate at night.

5th, He continued better. I ordered him four fmall doses of rhubarb and ipecacuan.; with opiates; and the white decoction.

6th, He complained of great weakness; of hectic heats; and of being more purged and griped. I repeated his powders, opiate, and decoction.

7th, He found himself no better; the giddiness and other complaints being troublesome. I ordered him the diascord. mixture every two hours, and the opiate at night. P. m. he retched.

8th, He was much the fame, and complained of pain in the lower and back part of his neck. His medicines and drink were repeated; and I allowed him a little wine.

9th, He was fick at the fromach, and much griped.
2 H 3 I ordered

I ordered him three finall doses of the ipecacuan. his opiate, wine, and drink.

10th, After midnight, the flux, tenefinus and gripes became more fevere. I prescribed the rhubarb, ipecacuan, and theriac, androm, in a draught, which procured several large stools with scybala, and relieved him. At night he took the opiate.

11th, The abdomen was tenfe, and he was feverely griped at times. I repeated the medicines, wine, and drink, as on the 8th.

12th, No alteration appeared, nor was any made in his prescriptions.

13th, He was no better of the flux; the hectic heats were greater; and he complained of pains in different places. I ordered him pulv. cort. Peruv. Dij. tinct. theb. gut, xv. every two hours; and his wine.

14th, His head ached, and he felt wandering pains. P. m. he complained of tinnitus aurium. His medicines and wine were regularly administered.

15th, The flux, tenefmus, and griping, were easier, though the other fymptoms were more troublesome. I prescribed rhubarb gr. x. tart. emet. gr. ss. theriac. gr. vi. three times, and afterward his bark and wine as before. P. m. the fever, wandering pains, and tinnitus aurium continued.

16th and 17th, He did not recover, though the bark

bark and wine were regularly given him, and the rhubarb, with tart. emet. at intervals.

18th, He was fent afhore to Λntigua hospital.

#### CASE 6.

RICHARD HARDIE, marine, aged about 28, who had never before been in a hot climate, complained he had been feized the preceding day with flux and griping; that his stools were more frequent, simaller, and bloody; and that the gripes and twisting of his bowels were become violent. He had a painful tenesmus which harassed him; his thirst was great; and the pulse was quick, and suller than natural. I ordered three small doses of ipecacuan. demulcent drink, and an opiate at night. P. m. though he was well vomited and purged, he was not relieved.

2d, He had a bad night; and the fymptoms continued. I prescribed the sal. cath. amar. opiate, and drink.

3d, He was no better, after a reftless night. I repeated the purge with an opiate; the drink as before; and the opiate at night. P. m. he continued the same, and looked wild.

4th, He rested a little in the night, but was not relieved. I repeated the three small doses of ipecacuan, and the opiate at night. P. m. the stools were very small, frequent, and bloody; he retch-

2 H 4 ed

ed at times; his hands were wet and cold, though his feet were warm; his countenance was wilder; and he wandered. I allowed him wine now and then, and repeated his opiate at night.

5th, He was very reftless, and wandered more in the night. He had frequent small stools, yet complained of no pain; and his legs were cold. I continued his wine; applied a large blister between his shoulders, and administered antiseptic clysters. P. m. the purging was abated; and the extremities were warm, but the wandering continued. I was informed that he fell down the fore cockpit hatchway in the night, when he was out at stool, through the carelessness of the attendant; but he did not complain of any part being hurt by the fall. At 8 o'clock he was very delirious, calling out for his companion who had died the 11th of the month, and expired at midnight\*.

\* The reason why I have taken so little notice of the daily appearance of the stools, is, that as there were few necessary buckets in the sick births, a number of the sick used the same one, so that it was impossible to distinguish the different stools; nor is it practicable to get a separate bucket for every patient to remedy the inconvenience.

CHAPTER

# CHAPTER III.

# On Rheumatism.

This not being a difease peculiar to, or frequent in hot climates, I had sew opportunities to form observations concerning it. But in the subsequent volumes, which contain the observations on difeases peculiar to cold climates, rheumatism will be found more frequent, and to deserve attention, as not being easily cured.

No rheumatic case occurred on board the Weafel. During the three voyages in the Rainbow we had twenty-nine rheumatic patients only; most of whose cases were chronical, and yielded to cathartics, small doses of calomel and jalap, with the addition of a little camphor, to prevent the mouth from being affected. Sometimes blisters were applied to the parts, but more frequently they were only rubbed several times a day with the ol. terebinth. and covered with slannel.

One man, who was much troubled with rheumatism in one of his wrists, elbow, and shoulder, on the fecond voyage was cured, by rubbing the parts a few times with a liquid which Captain Collingwood got from a gentleman in Jamaica (who is since dead), dead), to rub his limbs with when he was attacked with the gout\*; and which was often ferviceable to him in allaying the pain. What the composition was I know not; but the gentleman affured Captain Collingwood, it was made from herbs, and always had relieved him when he was laid up by terrible fits of the gout. It was as clear as water; and he desired it might be warmed in a bason or cup placed in hot water before it was used. In rubbing it on, it formed a kind of lather, and made the part look red afterwards, and break out in a small eruption. He called it vegetable cream.

The rheumatism of last August was acute, of which the cases were more numerous than those of the first voyage. I treated it therefore nearly as acute severs are managed in a cold climate. A little blood was taken from the patient; a purge was administered and repeated as was necessary, and antimonials were given twice a day with diluting drink; or eight grains of camphor; or the tincture of gum guaic. with sal. nitre, according to circumstances, and light diet. The solution of the gum promoted the alvine discharges, as well as a free perspiration: but unless the patient drank plentifully, it was apt to occasion slight dysuria. The

<sup>\*</sup> Captain Collingwood was very much affected for many years with, and died of, gout.

fame topical applications were applied as in the chronical cafes.

I have feen an emetic very ferviceable in lumbago, when bleeding and purges repeated, with fudorifics, had proved ineffectual.

### CHAPTER IV.

# On Ulcer.

The fame remarks may be made, almost, concerning ulcer as those I have already made on rheumatism. For, though it is, sometimes, extremely difficult to manage it in hot climates, it is not so frequent as in cold climates.

With respect to the treatment of ulcer, when either of long standing, or very large and foul, as frequently was the case, I never found any application whatever really ferviceable in reducing it to a healing condition, until the habit of body was first mended. The amendment was effected by repeated purges, to which calomel was joined; by abstinence from falt provisions and spirits; by keeping the limb in an horizontal posture; and by giving plenty of the bark in fubstance, to which elixir of vitriol was occasionally added, continuing the bark until the ulcer was healed. Whether warm digeftives; the precipitate dreffing; dry lint; or fomentations and cataplasms, with suitable bandages were applied, the ulcer by these methods foon difcharged laudable pus; diminished surprisingly in fize; and put on a healing appearance: after

after which common dreffings only were em-

ployed.

But it is to be observed, that scorbutic ulcer is not classed with those which I have been speaking of. The proper method of treating them is set forth at large in Doctor Lind's Treatise on Scurvy.

### CHAPTER V.

# On the Venereal Disease.

Respecting venereal affection, it was never my intention to treat, because this disease is neither endemic, nor epidemic, but contracted in all countries, and feafons, either by immediate contact with the diseased; or by matter discharged from an infected person being inserted into the wounds or sores of found people; or by the matter being applied to, or rubbed upon some very fine, or delicate part of a found person; for no one, I believe, doubts that by one or other of these ways, healthy people in all places, of every age and fex, may be infected, though not with equal readiness at all times; and because so much has been already faid on the subject, that the method of curing it, which is generally by mercurials, is pretended to be every where known. As coadjutants to mercurials, decoctions of farfaparilla, and the woods, are added, particularly in lues venerea. Bougies, in the cases of old sufferers, frequently become necessary in the cure.

Some practitioners, with great confidence, recommend compositions to prevent infection from libidinous contact; but of such compositions, and of their effects, I acknowledge myself ignorant.

3 Seamen

Seamen on board of his majesty's ships are so desirous to save their sisteen shillings \*, that by taking medicines of each others prescription, and putting off time, three out of every sour who complained on board the Rainbow had lues venerea. But in a good habit of body; after having given a single dose of physic—for it is not often necessary to take away blood—if the patient complained in proper time, and was afterwards temperate in living, I very seldom sailed in curing a recent gonor-rhea with the following pill, administered every night, without the assistance of anything else than demulcent drink, and abstinence from salt meat: Calomel, pp. rad. jalap. pulv. ā gr. ii. and made into a pill.

In hot climates it will be proper to unite camphor with mercurials, when given as an alterative; or to administer camphor internally when the ointment is rubbed in, to prevent falivation. I have known a falivation brought on when, to my knowledge, the patient had only taken sive grains of calomel in two days; two grains and a half each of the days.

<sup>\*</sup> They were obliged to pay that sum formerly, before 1796, out of their wages, to the surgeon for curing them of the venereal disease; but this is not the case at present.

### RECAPITULATION.

In the preceding observations, I have presented to the view, and serious consideration of the reader, the following important objects.

1st, An outline of the naval medical practice in 1761, 2, 3, 4, 5, 6, 7 and 8 \*; and the imperfect mode of supplying the navy with medicines until 1796, as before mentioned.

2d, The dangerous consequences which follow receiving sick on board of ships; as in the cases of Clency and Flowers being received on board of the Weafel†.

3d, The danger incurred by anchoring night to fickly ships; as appears from the Rainbow's anchoring near the Dutch ship at St. Jago in 1772 ‡.

4th, How foon febrile infection acts upon the fystem, as in the instances recited in 2d §.

5th, That intermittent fever is the same disease, at different periods; and in very different regions: viz. on the Greenland sea; on the coast of Africa;

<sup>\*</sup> See part i.

<sup>†</sup> Ibidem, ii.

<sup>‡</sup> See part ii. chap. i. and iv.

<sup>§</sup> See parts i. and ii.

in various parts of the West Indies; and at Newfoundland \*.

6th, That remittent fever is the very fame disease on the coast of Africa; in the West Indies; and at Newfoundland †.

7th, That intermittents and remittents are cured by the same means ‡.

8th, How very fimilar the cases of fever which proceeded from infection; or human effluvia at St. Jago, were to the cases which afterwards proceeded from marsh miasmata, or marsh vapor on the coast of Africa, and at other parts on board the Rainbow §?

9th, The fuperior good effects of bark in the treatment of remittent fever, to other methods.

10th, The means of preventing fever on the coast of Africa and in the West Indies, practised in 1773-4 by the author; and by those who since have been employed on that service; and in other situations in hot climates.

11th, An accurate description of dysentery in

vol. i. 2 i different

<sup>\*</sup> See parts i. and ii. † Ibidem. ‡ Ibidem.

<sup>§</sup> Ibidem. And see Dr. Clark's observations on diseases incident to seamen on long voyages; Mr. Reid's view of the diseases of the ar.ny; and Winterbottom's medical directions in hot climates, with their mode of treatment how successful.

<sup>||</sup> See many late writers on diseases of hot climates.

different fituations; and the imperfect mode of treating dyfentery which was then in practice.

I have been particularly attentive to infert the real occurrences only in the manner they appeared. So that the original flatement is not varied, though the language is much improved.

In administering the bark in the intermittent and remittent fever, I did not imitate the practice of any individual whatever; never having met at that time, nor for many years afterwards, with an author on the subject of fever, who prescribed it so liberally as I found it necessary to answer any good purpose. And the success which attended my practice furnished me with good reason to rejoice that I had deviated from examples and private advice of great professional authority.

The fymptoms of dyfentery were also carefully minuted daily. In my treatment of it, notwithstanding I imitated Huxham's and Sir John Pringle's method closely, except in administering bark when the disease became chronic—I cannot say I thought myself successful.

As I shall have occasion to resume the subject of the other diseases which I met with on this service, as well as of dysentery, I have been the more brief concerning them at present.

Notwithstanding

Notwithstanding all my attention, circumstances deserving notice may have escaped me. I am, however, hopeful that those which I have stated chastely, will be found hereafter as serviceable, as I have been well assured by many without solicitation, who have since been employed and found them in other hot climates; as well as on the coast of Africa\*.

\* Dr. Winterbottom's is a very ample testimony on the subject. To which many other names might be added.

END OF THE FIRST VOLUME.

#### ERRATA.

P. 19, line 16, for hypochondria, read hypochondriasis.

72, 2 of the note, dele "often."

282, — 9, dele "that night."

361, — 6, from the bottom, for scrobiculum, r. scrobiculus'

370, — 8, for were r. was.

384, — 3 and 4 from bottom, transpose, and r. as follows: but it agreed very indifferently with him, and his stomach would not retain it.

423, — 11, for infusion, r. decoction.

424, — 20, after d. r. to his.

461, — 8, for was, r. were.

480, — 12, after Weasel add "and Æolus."







